1936

Caldwell

TANKS *and* TOWERS OF WOOD AND STEEL

W. E. CALDWELL CO. INC.

LOUISVILLE, KY.

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TERMS AND CONDITIONS

Prices are subject to change without notice.

Terms are net cash, 30 days from date of shipment, unless otherwise specified.

Where we erect either tanks or towers, final payment is due upon completion of the work.

If customers do the erecting, we require payment to be made in the time agreed upon, whether the erection has been completed or not.

Our responsibility for delivery ceases when we secure a signed bill of lading from the Transportation Company for goods received in good order.

Customers must look to the R. R. Co. for any loss due to delay in delivery or damage sustained in transit. We are always glad to file claims for them when desired.

Claims must be made within 15 days after receipt of the goods.

If goods are not as ordered, or will not go together properly, customer must notify us and we will promptly ship correct parts or authorize him to have trouble corrected.

No claims for repairs of any kind, or for the replacing of materials, will be allowed unless we authorize same.

All Galvanized Steel Tanks that we ship set up are carefully tested to see that they are water-tight before being shipped, and purchasers are cautioned to examine such tanks thoroughly before accepting them from the Railway Company, as we cannot allow any charges for resoldering them, or repairing of any other kind.

Wood Tanks are shipped knocked down and well crated; when requested, we send suggestions explaining how erection should be done.

Receiving a tank or tower and setting it up constitutes an acceptance of it.

We cannot accept the return of any goods, as all tanks, towers, etc., are made up especially for each order.

When goods are ordered without details being specified, we will furnish what we think is suitable, and at our regular prevailing prices.

All contracts for the completion of work in a specified time are subject to fires, strikes, delays of Transportation Companies, breakage of machinery, accidents or other causes beyond our control.

Caldwell TANKS AND TOWERS

TANK AND TOWER CATALOG NO. 47

W. E. CALDWELL CO.
Brandeis and Brook Streets
LOUISVILLE, KY.

W. E. Caldwell, President
Established 1887 **Incorporated 1892**

ENGINEERING

RULE of Thumb, even coupled with practical experience, no longer suffices in these modern times. It requires a more exact knowledge of causes and effects. This is engineering.

Right from the very beginning we have applied engineering principles to the manufacture of our tanks and other products. For instance, our patented Tubular Tower was the very first standard line of towers designed on engineering principles.

The wide range of character and usage of our products has necessitated the development of a thoroughly qualified and comprehensive engineering staff.

Practical experience however, has not been lacking for we have been making wood tanks for fifty years and steel tanks more than forty years. It is therefore, easy to see why a Caldwell Tank has come to be known as "The Tank with a Reputation."

Our long experience as well as our engineering staff is at your service. We will gladly give you, without charge, technical service on any tank problem, particularly where mechanical equipment is to be used, as we also manufacture friction clutches, pulleys, etc.

We have not attempted to list, in the limited space of this catalog, all the different kinds of tanks and towers we manufacture, but only the standard types and to indicate a few of the others. We will be glad to quote you on anything in our line whether it is illustrated herein or not.

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VIRGINIA UNIVERSITY

Caldwell TANKS AND TOWERS

WOOD TANKS

Round, Rectangular or Other Shapes

For Rectangular Wood Tanks see pages 16 and 17

The life and tightness of a wood tank depends on the use of proper materials, design and workmanship. We own Cypress timber in Louisiana and cut it in our own mill to insure proper materials. During our fifty years of making wood tanks we have developed the best designs and learned what to do and what not to do to insure long life in a wood tank.

A wood tank has certain advantages over other kinds. It requires less care and painting, it gives better protection from freezing and heat and for use with hard or corrosive waters, will last longer than steel. It is also used for holding a great many chemicals where metals would be entirely unsuitable or too expensive.

A properly made wood tank should hold most liquids without any foreign matter or splines in the joints. The necessity of using other than a wood to wood joint indicates faulty manufacture or erection except for certain chemicals and fats.

KIND OF WOOD

CYPRESS—Red Gulf Cypress is easily the best tank wood for general use on account of its great durability. It is our specialty and we were the first to use it in the manufacture of tanks. The records show that Cypress, unlike other woods, does well when out of its native climate. It grows in a hot swamp and nature has given it extra protection.

We make only two grades of Cypress tanks; our Standard Grade, which is all heart on the inside and only a limited amount of clear sound sap on the outside and free of defects that would affect its tightness or life and our All Heart Grade, which is also free of sap. We do not make at all the "Select" Grade now on the market, as our Fir tank will last much longer and cost less.

Cypress is the best for water, either hot or cold, as it does not swell or shrink as much as other woods. It resists the action of alkalis, many acids, and other chemicals better than other woods, and is therefore largely used in chemical and allied trades. Cypress gives off no color, taste or odor and on this account is especially suited for holding drinking water, cider, vinegar, fruit syrups, or other food products.

FIR—Fir has many of the qualities of Cypress, both for water and for chemicals and it is equal to Cypress in resisting certain acids and chemicals. For water its life is somewhat shorter but as it costs less it is recommended when something less expensive than Cypress is wanted. It is usually used for pickle tanks and sometimes for kraut.

REDWOOD—Redwood is the best of the western woods for tank purposes. It has lasting qualities that approach those of Cypress. It is unusually free of defects and costs less than Cypress in the larger sizes.

YELLOW PINE—Long Leaf Yellow Pine (we do not use the short leaf variety) is furnished only in our special tank grade cut to our own specifications. Do not confuse it with the grades used in cheap yellow pine tanks. It is used chiefly in industrial tanks of large size, which require greater thickness of material, such as pickling and paper mill tanks. It is also used for holding certain acids and chemicals, particularly sulphuric acid.

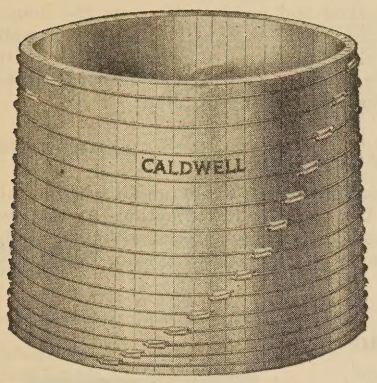
OTHER WOODS—Poplar, White Pine, "White Cedar" (really Juniper), Oak, Maple and other woods are sometimes used for tanks. They are decidedly inferior to the regular tank woods for the usual purposes. Some, however, have unique qualities that adapt them to certain special purposes. For instance, Quarter-Sawed White Oak is used for wine and spirit tanks.

LININGS

We are prepared to line either round or rectangular tanks with Rubber, Lead, Copper, Stainless or Galvanized Steel, Monel Metal, the Acidproof Bronzes, or any other lining required.

ROUND WOOD TANKS

See prices on pages, 6, 7, 8, and 9



A round tank should be used wherever possible in preference to other shapes, for its construction and bracing is much simpler and therefore it costs much less to make and erect.

SIZES

We can make any size of tank you want, but, as a matter of economy, it is best to select from the sizes that are cut from standard lengths of lumber. The sizes which are most in demand are listed on pages 6, 7, 8 and 9, and the standard sizes are printed in heavy type.

CONSTRUCTION

The bottom pieces are dressed, ripped, machine jointed and well doweled. The edges are chamfered for the croze or groove in the staves but left a little thicker to allow for possible shrinkage before erecting. A thin shaving must be taken off with a hand-plane in erecting to make a driving fit with the croze in the staves. The staves are dressed, ripped, and machine jointed and croze or groove cut to suit the circle of the bottom and the taper of the tank. (See cut of detail below.)

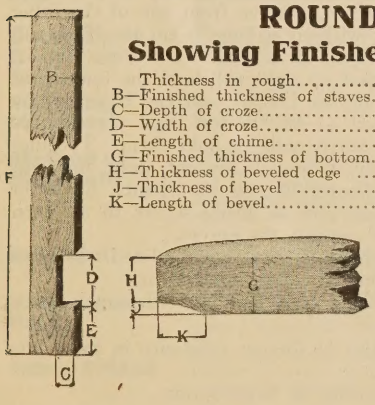
HOOPS

The hoops, usually round, are wrought iron instead of steel so they will not rust as easily. But Brass, Galvanized, Lead Covered, Bronze, Monel Metal or other kinds can be furnished.

The proper number and size are carefully calculated to give ample strength with a factor of safety of four to one. They are cut to the exact lengths necessary to suit the taper of the tank and are bent to the proper circle. The threads are machine cut, not rolled on, and the hoops are full size throughout. The connecting lugs are of malleable instead of cast iron and the necessary nuts are furnished.

DETAILS
ROUND WOOD TANKS
Showing Finished Measurements in Inches

Thickness in rough.....	1½″	2″	2½″	3″	4″	6″	8″
B—Finished thickness of staves....	1⅜″	1¾″	2¼″	2¾″	3½″	5½″	7½″
C—Depth of croze.....	⅜″	½″	⅝″	⅝″	¾″	⅞″	1″
D—Width of croze.....	1½″	1⅝″	2″	2½″	3¼″	5¼″	7¼″
E—Length of chime.....	3⅜″	3⅜″	3½″	3½″	3¾″	4¾″	5¼″
G—Finished thickness of bottom....	1⅜″	1¾″	2¼″	2¾″	3½″	5½″	7½″
H—Thickness of beveled edge	1 5/32″	1 21/32″	2 5/32″	2 13/32″	3 9/32″	5 9/32″	7 9/32″
J—Thickness of bevel	7/32″	3/32″	7/32″	3/32″	7/32″	3/32″	7/32″
K—Length of bevel.....	1⅜″	1⅜″	1⅜″	1⅜″	1⅜″	1⅜″	1⅜″



Section of Tank Staves and Bottoms

Caldwell TANKS AND TOWERS

ROUND WOOD TANKS—Continued

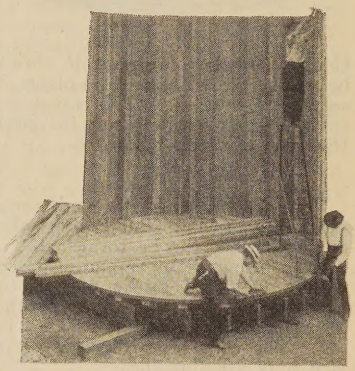
MARKING

The bottom pieces of all tanks are marked and numbered, as are the hoops, but the staves are not, as they will go in anywhere they are placed, it only being necessary to fit the last stave. We always send a few inches extra in width so this can be done. A Blue Print plan is supplied showing how to space hoops so that each will bear the strain it is calculated for and no more.

METHOD OF CRATING

Particular attention is paid to the crating of our Tanks and to having all crates and pieces plainly stenciled with the name and destination, so that we have a minimum of complaints of broken crates or lost pieces, although many of our shipments are to points in New England, Canada and west of the Mississippi. For export all parts are boxed.

ERECTION



Be sure the foundation is strong and rigid enough for the load and will support the bottom only. The staves must have at least one-half inch clearance on all sides.

Lay bottom according to marks and drive tightly together so joints are good the full length. Use a wood block to hammer against. Dress a thin shaving off the top edge of the bottom, just enough to make a driving fit with the croze in staves. (See cut.)

Drive staves close onto bottom and up tight against each other edgewise taking care not to jar loose other staves. Make no allowance for swelling and see that joints in staves do not come in line with joints in the bottom. Rip, plane and fit the last stave exactly into the space left. By saving four or five of the narrower staves to the last these may be selected so that little fitting may be necessary. Where several tanks of a size are being erected, a stave from one of the other tanks can usually be found to fit the space without having to cut it. Toe nails or blocks nailed on top will hold the staves till all are on.

A rope thrown around the top and twisted up tight will hold the tank while putting on the hoops. Mark the spacing of the hoops from the blueprint on four or five staves around the tank. Start at the bottom and place hoops according to the marking, using staples or small nails to hold them. The lugs should be placed spirally around the tank. When all are set, draw up tight using only an 8-inch wrench for ⅝-inch hoops, 10-inch for ¾-inch hoops or 15-inch for ⅞ or 1-inch hoops. After hoops are on bring staves to an even surface by pounding on a wood block held against the staves.

The tank should be filled as soon as possible after it is completed. It often takes several days after tank is filled before all joints swell tight.

Paint tank two coats on outside only, using good lead and oil paint. Paint hoops one coat before erection.

CAUTION—Never put any caulking, paint or foreign substance in the joints and do not paint the tank on the inside.

If any parts do not fit, do not use but notify us immediately.

Caldwell TANKS AND TOWERS

KEY TO PRICE LIST OF ROUND WOOD TANKS

Tell Us

Capacity in gallons, not in barrels; or state inside diameter and inside depth, or outside height, thickness and kind of lumber and intended purpose; also if a Cover (P. 11), Gauge (P. 12), Tower (P. 37-44), or other articles, are wanted.

Taper

All Tanks are regularly built with a taper of one inch to the foot, but tanks without taper can be furnished at a slight additional cost.

Capacities

Are based on straight staves, viz., Tanks without any taper. The capacity of tanks as regularly furnished is therefore somewhat less than the listed capacities.

Dimensions

Are given for inside measurements for both diameter and depth; for outside length of stave add for 1½ inch lumber 4½ inches; 2 inch, 5 inches; 2½ inch, 5½ inches and for 3 inch, 6 inches. This allows us 2 inches for squaring up the ends of the lumber, viz., 12 foot lumber will be finished up 11 feet 10 inches long, etc.

Standard Sizes

Tanks listed are the standard sizes that cut to best advantage from standard lengths of lumber, which comes in lengths of even feet. We can supply tanks of any other sizes that may be required.

Material

Is Cypress, Redwood, Fir and Long Leaf Yellow Pine. We can furnish other woods if required.

When to Use Each

Read carefully pages 2 and 3

Thicknesses Used

Cypress is furnished in 1½, 2, 2½, 3 and 4 inch; Fir and Redwood in 2, 2½, 3 and 4 inch; Yellow Pine in 2, 3, 4, 6, 8, and 10 inch.

Thicknesses Recommended

Cypress, Redwood and Fir, 2 inch for tanks not over 14 feet 0 inch diameter and 13 feet 5 inches deep (although 1½ inches may be used for tanks under 8 feet 0 inch diameter by 7 feet 5 inches deep); 2½ inch for tanks 16 to 20 feet diameter inclusive and 3 inch for larger sizes; 2½ inch may be used for staves with 3 inch bottoms up to 24 feet diameter by 19 feet 4 inches deep.
Note.—The above is for ordinary purposes. Thicknesses must be increased for special purposes and for some uses 4 inch Cypress is required of which we carry a large stock.
For hot water 2½ or 3 inch All Heart Cypress is recommended. Long Leaf Yellow Pine tanks are the same as above except for special purposes which usually use 4, 6 and sometimes 8 and 10 inches thick.

Splicing

Staves and bottom boards are made in one-piece except that lengths longer than 16 feet, when not available, may be spliced.

Discounts

Discounts and freight rates will be quoted on application; or we will name net delivered prices if size of tank is given.

Hoops and Lugs

Round hoops with lugs are standard and are furnished unless otherwise specified. Round hoop sections are not over 20 to 22 feet long and one lug is furnished for each section.

Galvanized Hoops and Lugs

These hoops and lugs either round or flat can be furnished galvanized at a slight additional cost.

Shipping Weights

Are the same for Cypress, Redwood, Fir, White Pine, White Cedar and Poplar. Long Leaf Yellow Pine weighs about 40 per cent more than Cypress.

Method of Shipment

Tanks are never put together at the factory, unless ordered set up, but are got out from standard templets and shipped knocked down, and well crated. Enough staves are sent to allow for dressing off and fitting in the last one. Hoops are cut to lengths and a plan supplied showing how to space them. See Page 4.

Erection

We will quote prices erected where desired—state how high above ground tank will go and whether on trestle or a building.

Foundation Plans

We can furnish customer plans for building foundations for tank to suit any conditions. Standard plans for tank foundations on the ground furnished without extra cost.

Other Prices

Prices for Plain Round Tanks are listed on Pages 6, 7, 8 and 9. Prices for other styles illustrated or any other kind wanted, will be quoted on application.

Caldwell TANKS AND TOWERS

LIST PRICES OF ROUND TANKS

Cypress, Redwood, Fir and Yellow Pine

For Redwood use Cypress lists and weights. For Yellow Pine use Fir lists and add 40% to weights.

See description on pages 2 to 5. Covers, etc. on pages 11 and 12.

Number	Gallons (No Taper) Tapered Slightly Less	Inside Diameter Ft. In.	Inside Depth Ft. In.	Number of Hoops	Weights and List Prices on Wood Tanks					
					1½″ Cypress		2″ Cypress		2″ Fir	
					Shipping Weight Lbs.	Price f.o.b. Louisville	Shipping Weight Lbs.	Price f.o.b. Louisville	Shipping Weight Lbs.	Price f.o.b. Louisville
1	127	3—0	2—5	3	157	$16.68	199	$21.69	199	$16.89
2	158	"	3—0	3	173	18.57	221	24.14	221	18.79
3	180	"	3—5	4	199	21.06	251	27.38	251	21.33
4	174	3—6	2—5	3	182	19.62	234	25.50	234	19.88
5	216	"	3—0	3	202	21.87	260	28.43	260	22.08
6	246	"	3—5	4	231	24.72	295	32.13	295	25.04
7	227	4—0	2—5	3	214	22.05	274	28.67	274	22.69
8	282	"	3—0	3	236	24.51	304	31.86	304	25.20
9	321	"	3—5	4	268	27.69	344	36.00	344	28.51
10	415	"	4—5	4	312	32.64	404	42.44	404	33.54
11	288	4—6	2—5	3	244	25.35	314	32.96	314	26.00
12	357	"	3—0	3	268	27.99	346	36.39	346	28.68
13	407	"	3—5	4	306	31.56	392	41.03	392	32.33
14	526	"	4—5	4	356	36.99	458	48.09	458	37.85
15	502	5—0	3—5	4	345	34.29	443	44.58	443	36.60
16	**588**	"	**4—0**	**4**	**373**	**37.11**	**479**	**48.24**	**479**	**39.62**
17	649	"	4—5	4	407	40.35	521	52.46	521	43.02
18	796	"	5—5	5	474	46.98	608	61.08	608	50.16
19	300	6—0	1—5	2	279	26.52	357	34.47	357	27.79
20	423	"	2—0	3	327	30.90	417	40.17	417	32.36
21	511	"	2—5	3	359	34.20	461	44.46	461	35.84
22	723	"	3—5	4	440	41.73	562	54.26	562	43.58
23	846	"	4—0	4	472	45.03	606	58.55	606	47.06
24	934	"	4—5	4	514	48.81	658	63.45	658	51.08
25	**1145**	"	**5—5**	**5**	**602**	**56.88**	**768**	**73.95**	**768**	**59.41**
26	1357	"	6—5	6	684	64.56	872	83.93	872	67.33
27	1568	"	7—5	7	770	72.51	980	94.26	980	75.55
28	1780	"	8—5	7	836	79.11	1068	102.84	1068	82.51
29	1991	"	9—5	8			1176	113.25	1176	90.81
30	1096	6—6	4—5	4	563	53.46	721	69.50	721	55.95
31	1344	"	5—5	5	657	62.16	839	80.81	839	64.91
32	**1592**	"	**6—5**	**6**	**742**	**70.35**	**950**	**91.46**	**950**	**73.34**
33	1840	"	7—5	7	839	79.08	1069	102.81	1069	82.38
34	2089	"	8—5	7	909	86.13	1163	111.98	1163	89.82
35	2337	"	9—5	8			1381	123.29	1381	98.78
36	1272	7—0	4—5	4	616	58.59	790	76.17	790	61.29
37	1559	"	5—5	5	717	67.86	917	88.22	917	70.90
38	1847	"	6—5	6	819	77.10	1042	100.23	1042	80.46
39	2135	"	7—5	7	912	85.95	1162	111.74	1162	89.58
40	2423	"	8—5	7	997	94.02	1271	122.22	1271	98.08
41	2711	"	9—5	8			1404	134.90	1404	108.07
42	1790	7—6	5—5	5	775	73.50	991	95.55	991	76.76
43	2120	"	6—5	6	884	83.34	1128	108.35	1128	86.97
44	2450	"	7—5	7	985	92.73	1255	120.56	1255	96.61

Sizes printed in black type are the standard sizes for the capacity mentioned.

Write for discounts and freight rates or state size of tank wanted, and we will quote net delivered prices.

LIST PRICES OF ROUND TANKS

Cypress, Redwood, Fir and Yellow Pine

For Redwood use Cypress lists and weights. For Yellow Pine use Fir lists and add 40% to weights.

See description on pages 2 to 5. Covers, etc. on pages 11 and 12.

Number	Gallons (No Taper) Tapered Slightly Less	Inside Diameter Ft. In.	Inside Depth Ft. In.	Number of Hoops	Weight and List Prices on Wood Tanks					
					1½" Cypress		2" Cypress		2" Fir	
					Shipping Weight Lbs.	Price f.o.b. Louisville	Shipping Weight Lbs.	Price f.o.b. Louisville	Shipping Weight Lbs.	Price f.o.b. Louisville
45	2781	7—6	8—5	7	1073	$101.34	1371	$131.75	1371	$105.76
46	3111	"	9—5	8			1513	145.28	1513	116.34
47	532	8—0	1—5	2	423	40.35	545	52.46	545	42.13
48	752	"	2—0	3	477	45.42	613	59.04	613	47.52
49	908	"	2—5	3	519	49.62	669	64.50	669	51.95
50	1284	"	3—5	4	635	60.27	815	78.35	815	63.00
51	1660	"	4—5	4	730	69.45	938	90.29	938	72.52
52	2036	"	5—5	5	846	79.92	1082	103.89	1082	83.35
53	2412	"	6—5	6	951	89.94	1217	116.93	1217	93.84
54	**2788**	**"**	**7—5**	**7**	**1067**	**100.44**	**1361**	**130.58**	**1361**	**104.68**
55	**3164**	**"**	**8—5**	**7**	**1168**	**109.95**	**1490**	**142.94**	**1490**	**114.63**
56	3540	"	9—5	8			1669	159.71	1669	127.61
57	4292	"	11—5	10			1971	188.30	1971	150.29
58	2300	8—6	5—5	5	909	85.92	1163	111.69	1163	89.60
59	2724	"	6—5	6	1022	96.45	1306	125.39	1306	100.66
60	3149	"	7—5	7	1143	107.64	1459	139.94	1459	112.25
61	3573	"	8—5	7	1251	117.84	1597	153.20	1597	122.89
62	3998	"	9—5	8			1784	170.58	1784	136.46
63	4846	"	11—5	10			2106	201.05	2106	160.52
64	2578	9—0	5—5	5	1037	92.88	1259	120.75	1259	96.76
65	3054	"	6—5	6	1116	104.61	1420	135.99	1420	108.92
66	3530	"	7—5	7	1244	116.34	1580	151.25	1580	120.40
67	**4006**	**"**	**8—5**	**7**	**1357**	**127.20**	**1727**	**165.36**	**1727**	**132.36**

Number	Gallons (No Taper) Tapered Slightly Less	Inside Diameter Ft. In.	Inside Depth Ft. In.	Number of Hoops	Weight and List Prices on Wood Tanks			
					2" Cypress		2" Fir	
					Shipping Weight Lbs.	Price f.o.b. Louisville	Shipping Weight Lbs.	Price f.o.b. Louisville
68	4482	9—0	9—5	8	1905	$182.06	1905	$145.56
69	5433	"	11—5	10	2242	213.96	2242	171.18
70	832	10—0	1—5	2	758	72.93	758	58.65
71	1175	"	2—0	3	862	82.76	862	66.29
72	1420	"	2—5	3	934	89.78	934	71.98
73	2007	"	3—5	4	1113	106.67	1113	85.49
74	2594	"	4—5	4	1255	120.51	1255	96.70
75	3182	"	5—5	5	1450	138.96	1450	111.26
76	3769	"	6—5	6	1631	156.05	1631	124.86
77	4357	"	7—5	7	1809	172.85	1809	138.29
78	4945	"	8—5	7	1969	188.30	1969	150.62
79	**5532**	**"**	**9—5**	**8**	**2165**	**206.70**	**2165**	**165.17**
80	6707	"	11—5	10	2539	241.95	2539	193.14
81	7882	"	13—5	11	2897	275.93	2897	220.19
82	**6100**	**10—6**	**9—5**	**8**	**2290**	**218.55**	**2290**	**174.71**
83	1198	12—0	1—5	2	1004	96.84	1004	77.93
84	1692	"	2—0	3	1133	108.96	1133	87.46
85	2044	"	2—5	3	1217	117.15	1217	94.08

Sizes printed in black type are the standard sizes for the capacity mentioned.

Write for discounts and freight rates or state size of tank wanted, and we will quote net delivered prices.

LIST PRICES OF ROUND TANKS

Cypress, Redwood, Fir and Yellow Pine

For Redwood use Cypress lists and weights. For Yellow Pine use Fir lists and add 40% to weights.

See description on pages 2 to 5. Covers, etc. on pages 11 and 12.

No.	Gallons (No Taper) Tapered Slightly Less	Bottom Diameter	Inside Depth	No. of Hoops	2-Inch			2½-Inch		
					Shipping Wt. Lbs.	Cypress Price f.o.b. Louisville	Fir Price f.o.b. Louisville	Shipping Wt. Lbs.	Cypress Price f.o.b. Louisville	Fir Price f.o.b. Louisville
86	2891	12′—0″	3′—5″	4	1431	$137.48	$110.28	1941	$190.20	$142.20
87	3737	"	4′—5″	4	1623	156.00	125.16	2202	215.80	161.35
88	4582	"	5′—5″	5	1837	176.36	141.36	2487	243.70	181.80
89	5428	"	6′—5″	6	2050	196.68	157.56	2768	271.25	202.45
90	6274	"	7′—5″	7	2284	218.87	174.91	3071	300.95	224.10
91	**7120**	"	**8′—5″**	**7**	**2479**	**237.44**	**189.94**	**3327**	**326.05**	**244.75**
92	**7966**	"	**9′—5″**	**8**	**2715**	**259.67**	**207.48**	**3641**	**356.80**	**265.40**
93	9658	"	11′—5″	10	3164	302.18	241.26	4227	414.25	307.70
94	11350	"	13′—5″	12	3637	346.79	276.49	4838	474.20	351.60
95	13042	"	15′—5″	14	4150	395.11	314.53	5494	538.40	398.20
96	7726	12′—6″	8′—5″	7	2602	249.17	199.43	3503	343.50	255.70
97	**8644**	"	**9′—5″**	**8**	**2844**	**272.37**	**217.71**	**3821**	**374.45**	**278.50**
98	**10481**	"	**11′—5″**	**10**	**3316**	**316.64**	**252.87**	**4431**	**434.25**	**322.70**
99	**12317**	"	**13′—5″**	**10**	**3717**	**362.90**	**289.43**	**5069**	**496.75**	**368.30**
100	14153	"	15′—5″	14	4345	413.16	328.90	5750	563.50	416.70

NOTE—Previous prices are for 1½ and 2-inch Tanks, but the following sizes are priced in 2, 2½ and 3 inch. We advise 2½ or 3 inch for tanks 14 feet diameter to 20 feet inclusive, and 3 inch for larger sizes.

See Key to Price List on Page 5.

No.	Gallons (No Taper) Tapered Slightly Less	Bottom Diameter	Inside Depth	Number Hoops		2-Inch Shipping Wt. Lbs.	2-Inch Price f.o.b. Louisville	2½-Inch Shipping Wt. Lbs.	2½-Inch Price f.o.b. Louisville	3-Inch Shipping Wt. Lbs.	3-Inch Price f.o.b. Louisville
103	8540	14′—0″	7′—5″	7	Cyp.	2766	$264.69	3728	$365.67	4392	$431.85
					Fir	2766	211.80	3728	272.36	4392	321.74
104	9691	"	8′—5″	7	Cyp.	2990	286.22	4031	395.51	4750	467.27
					Fir	2990	229.17	4031	294.66	4750	348.23
105	10843	"	9′—5″	8	Cyp.	3264	311.93	4386	429.71	5162	507.05
					Fir	3264	249.43	4386	320.01	5162	377.77
106	13146	"	11′—5″	10	Cyp.	3835	365.39	5123	500.13	6005	588.47
					Fir	3835	291.57	5123	372.37	6005	438.33
107	**15449**	"	**13′—5″**	**12**	**Cyp.**	**4382**	**416.84**	**5825**	**568.35**	**6822**	**667.68**
					Fir	**4382**	**332.21**	**5825**	**423.06**	**6822**	**497.22**
108	17752	"	15′—5″	14	Cyp.	5038	478.10	6643	646.58	7752	757.14
					Fir	5038	380.02	6643	481.07	7752	563.60
113	11155	16′—0″	7′—5″	7	Cyp.	3308	316.14	4456	436.65	5250	515.82
					Fir	3308	253.00	4456	325.25	5250	384.33
114	12659	"	8′—5″	7	Cyp.	3561	340.40	4802	470.69	5639	556.14
					Fir	3561	272.43	4802	350.57	5639	414.35
115	14163	"	9′—5″	8	Cyp.	3872	369.60	5204	509.42	6125	601.19
					Fir	3872	295.55	5204	379.42	6125	447.89
116	17171	"	11′—5″	10	Cyp.	4578	435.05	6093	594.09	7141	698.57
					Fir	4578	346.74	6093	442.08	7141	520.09
117	**20179**	"	**13′—5″**	**12**	**Cyp.**	**5319**	**503.81**	**7018**	**682.19**	**8193**	**799.26**
					Fir	**5319**	**400.50**	**7018**	**507.46**	**8193**	**594.85**
118	23187	"	15′—5″	14	Cyp.	6062	572.72	7941	770.01	9244	899.88
					Fir	6062	454.45	7941	572.75	9244	669.67
119	**26195**	"	**17′—5″**	**17**	**Cyp.**	.....	.....	**8891**	**899.58**	**10320**	**1049.88**
					Fir	.....	.....	**8891**	**639.38**	**10320**	**745.67**
120	29203	"	19′—5″	20	Cyp.	.....	.....	10774	1043.72	11464	1216.26
					Fir	.....	.....	10774	710.26	11464	825.93

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LIST PRICES OF ROUND TANKS

Cypress, Redwood, Fir and Yellow Pine

For Redwood use Cypress lists and weights. For Yellow Pine use Fir lists and add 40% to weights.

See description on pages 2 to 5. Covers, etc. on pages 11 and 12.

No.	Gallons (No Taper) Tapered Slightly Less	Bottom Diam.	Inside Depth	No. of Hoops	Shipping Wt. Lbs.	2½-Inch Cypress Price f.o.b. Louisville	2½-Inch Fir Price f.o.b. Louisville	Shipping Wt. Lbs.	3-Inch Cypress Price f.o.b. Louisville	3-Inch Fir Price f.o.b. Louisville
126	17765	18′—0″	9′—4″	8	6226	$621.23	$453.15	7301	$730.01	$533.17
127	21571	"	11′—4″	10	7201	714.83	522.57	8420	838.89	613.30
128	25378	"	13′—4″	12	8211	811.47	594.40	9572	949.70	695.68
129	**29184**	"	15′—4″	**15**	**9299**	**916.62**	**669.10**	**10800**	**1068.72**	**780.75**
130	**32990**	"	17′—4″	**18**	**10426**	**1065.99**	**750.18**	**12071**	**1241.33**	**872.54**
131	**36796**	"	19′—4″	**21**	**11707**	**1239.57**	**838.30**	**13719**	**1465.43**	**971.22**
132	34252	19′—6″	15′—4″	15	10225	1021.65	740.80	11883	1192.86	865.68
133	**38726**	"	17′—4″	**18**	**11119**	**1193.33**	**832.91**	**13360**	**1389.62**	**968.84**
134	**43183**	"	19′—4″	**21**	**12864**	**1375.07**	**925.02**	**14833**	**1598.61**	**1071.99**
135	21932	20′—0″	9′—4″	8	7208	734.81	523.68	8447	864.59	615.92
136	26632	"	11′—4″	10	8288	838.31	600.52	9686	983.82	704.48
137	31334	"	13′—4″	13	9476	950.97	684.03	11031	1112.16	799.71
138	36035	"	15′—4″	16	10701	1066.70	769.87	12415	1243.79	897.43
139	40725	"	17′—4″	19	12118	1247.69	872.79	13988	1450.10	1011.90
140	45435	"	19′—4″	22	13489	1435.71	961.60	15516	1665.81	1112.43
141	26537	22′—0″	9′—4″	9	.....	.....	.....	9685	1014.90	715.62
142	32224	"	11′—4″	11	.....	.....	.....	11084	1148.94	815.35
143	37914	"	13′—4″	14	.....	.....	.....	12597	1292.70	921.83
144	**43601**	"	15′—4″	**17**	.....	.....	.....	**14270**	**1449.56**	**1037.99**
145	**49289**	"	17′—4″	**20**	.....	.....	.....	**15942**	**1670.91**	**1153.59**
146	**54976**	"	19′—4″	**24**	.....	.....	.....	**17780**	**1921.10**	**1279.83**
147	60663	"	21′—4″	27	.....	.....	.....	19453	2171.76	1433.76
148	45121	24′—0″	13′—4″	15	.....	.....	.....	14330	1500.14	1061.30
149	**51889**	"	15′—4″	**18**	.....	.....	.....	**16132**	**1672.28**	**1188.71**
150	58657	"	17′—4″	21	.....	.....	.....	17993	1915.14	1316.21
151	**65426**	"	19′—4″	**25**	.....	.....	.....	**20057**	**2193.48**	**1457.94**
152	72194	"	21′—4″	29	.....	.....	.....	22121	2487.50	1640.97
153	**78962**	"	23′—4″	**33**	.....	.....	.....	**24484**	**2823.68**	**1850.74**
154	92663	26′—0″	23′—4″	34	.....	.....	.....	27319	3169.38	2072.91
155	70627	28′—0″	15′—4″	20	.....	.....	.....	20249	2159.87	1480.65
156	**79840**	"	17′—4″	**23**	.....	.....	.....	**22753**	**2457.24**	**1649.49**
157	89052	"	19′—4″	27	.....	.....	.....	24956	2777.43	1801.60
158	98264	"	21′—4″	31	.....	.....	.....	27768	3153.08	2038.82
159	**107476**	"	23′—4″	**35**	.....	.....	.....	**28461**	**3535.31**	**2276.23**
160	81077	30′—0″	15′—4″	20	.....	.....	.....	22261	2440.77	1639.48
161	91653	"	17′—4″	24	.....	.....	.....	24828	2833.70	1815.64
162	**102228**	"	19′—4″	**28**	.....	.....	.....	**27828**	**3158.30**	**2025.34**
163	112803	"	21′—4″	32	.....	.....	.....	30634	3538.71	2262.67
164	**123379**	"	23′—4″	**37**	.....	.....	.....	**33656**	**3963.45**	**2528.45**

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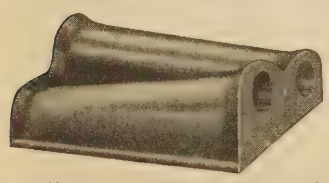
TANK HOOPS AND LUGS



MALLEABLE IRON ROUND LUGS

	Each
½ inch	$0.36
⅝ inch	.48
¾ inch	.60
⅞ inch	.72
1 inch	.96
1⅛ inch	1.20

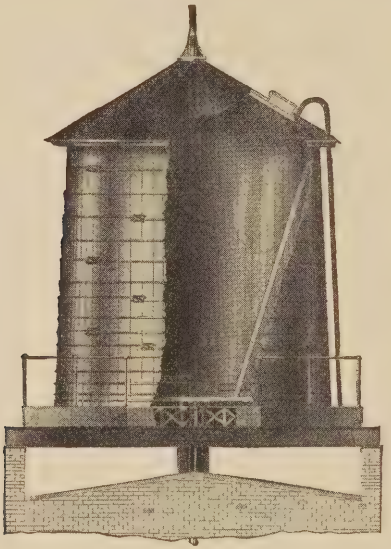
WROUGHT IRON TANK HOOPS—Round or Flat—Prices on application.

Caldwell TANKS AND TOWERS

GRAVITY TANK ON BUILDING TO SUIT INSURANCE REQUIREMENTS

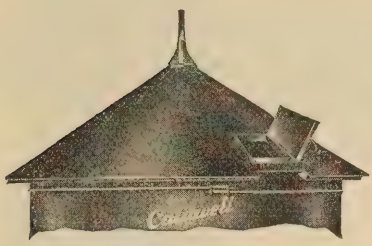
These prices are for tanks built to suit the requirements of either the Factory Mutual Insurance Companies or any of the Stock Companies. Such tanks are required to be built of a certain size for a given capacity and to be provided with round iron (not steel) hoops of a specified number and size. They must be constructed of 2½ inch material if of 20,000 gallons or less, and of 3 inch for larger sizes.

If furnished complete, the tanks must be provided with a Conical Roof, covered with Shingles, Rubberoid or Metal, and an Inside Flat Cover for frost proofing, together with an indicator or Tank Register, an Inside Wooden Ladder, and an Outside Iron Ladder extending three feet above the tank with ends curved over.



Gallons	Inside Diam., Ft. In.	Inside Depth, Ft. In.	Thickness	No. Round Hoops	Shipping Weight, Lbs.	Price Complete, Tank Only	
						Cypress	Fir
5,000	10—0	9—4	2½	7	2,952	$ 448.45	$ 299.80
7,500	12—6	9—4	2½	8	3,914	591.95	397.50
10,000	12—6	13—4	2½	13	5,254	782.95	530.90
12,000	14—0	11—4	2½	10	5,303	792.70	536.20
15,000	14—0	15—4	2½	14	6,853	1,010.60	689.90
18,000	16—0	13—4	2½	13	7,195	1,063.30	723.75
20,000	16—0	15—4	2½	16	8,173	1,195.30	819.20
25,000	16—0	17—4	3	19	10,613	1,561.50	1,066.20
30,000	18—0	17—4	3	20	12,380	1,814.80	1,244.50
35,000	18—0	19—4	3	24	13,798	2,100.65	1,382.45
40,000	19—6	19—4	3	24	15,734	2,384.35	1,565.35
50,000	22—0	19—4	3	23	18,300	2,777.25	1,829.40
60,000	24—0	19—4	3	26	20,869	3,141.05	2,103.35
75,000	24—0	23—4	3	36	25,634	3,810.15	2,678.10
99,000	30—0	19—4	3	33	29,153	4,296.00	2,929.60
100,000	28—0	23—4	3	42	31,958	4,691.70	3,330.00

COVERS FOR ROUND WOOD TANKS



Standard Conical Cover.
Furnished with Rubberoid Roofing, Shingles or Tin.

Conical Cover.
Arranged for Frost Protection with Inside Flat Cover Supported by Joists.

PRICES FOR CONICAL COVERS

Cover for Tank	With Rubberoid Roofing		With Wood Shingles		With Rubberoid Roofing and Flat Cover		With Wood Shingles and Flat Cover		Plain Flat Cover	
Diameter	Wt. lbs.	Price	Wt. lbs.	Price	Wt. lbs.	Price	Wt. lbs.	Price	Wt. lbs.	Price
5 ft. 0 in.	195	$ 20.67	342	$ 21.45	301	$ 26.16	449	$ 26.91	106	$ 5.49
6 ft. 6 in.	217	22.95	380	23.85	335	29.01	498	29.91	118	6.06
8 ft. 0 in.	327	34.38	540	35.52	482	42.33	695	43.47	155	7.95
10 ft. 0 in.	485	45.45	750	46.89	734	61.29	999	62.73	249	15.84
12 ft. 6 in.	832	62.10	1175	64.02	1271	83.55	1614	86.55	439	21.45
14 ft. 0 in.	1117	74.91	1500	77.07	1657	103.44	2040	105.60	540	28.53
16 ft. 0 in.	1249	98.31	1810	101.46	1942	133.89	2503	137.04	693	35.58
18 ft. 0 in.	1612	118.17	2300	121.98	2467	162.06	3135	165.87	855	43.89
19 ft. 6 in.	1926	136.95	2625	140.91	2948	189.39	3647	193.35	1022	52.44
22 ft. 0 in.	2161	176.88	3200	182.64	3631	244.80	4670	250.56	1470	67.92
24 ft. 0 in.	2491	232.08	4040	240.45	4221	312.00	5770	320.37	1730	79.92
26 ft. 0 in.	2991	288.06	5050	298.89	4864	374.58	6923	385.44	1873	86.52
28 ft. 0 in.	3716	356.40	6350	370.11	5901	457.35	8535	471.06	2185	100.95
30 ft. 0 in.	4750	452.13	8100	469.41	7425	576.03	10775	593.31	2675	123.90

Intermediate sizes take next higher list.

TANK LADDERS

Inside Wood Ladders and Outside Iron Ladders are a great convenience on any Tank. Prices on Outside Iron Ladders include ladder curves for Tanks with Conical Covers or a 3 foot extension above for Tank without Conical Cover. Prices of Towers include Outside Iron Ladders.

Depth of Tank	Inside Wood Ladder		Outside Iron Ladder		Depth of Tank	Inside Wood Ladder		Outside Iron Ladder	
	Wt. lbs.	Price	Wt. lbs.	Price		Wt. lbs.	Price	Wt. lbs.	Price
5 ft. 5 in.	24	$ 1.34	45	$10.13	17 ft. 5 in.	72	$ 3.96	99	$22.28
6 ft. 5 in.	28	1.56	50	11.25	19 ft. 5 in.	80	4.40	108	24.30
7 ft. 5 in.	32	1.76	54	12.15	21 ft. 5 in.	88	4.80	117	26.33
8 ft. 5 in.	36	1.98	59	13.28	23 ft. 5 in.	96	5.27	126	28.35
9 ft. 5 in.	40	2.21	63	14.18	25 ft. 5 in.	104	5.72	135	30.38
11 ft. 5 in.	48	2.64	72	16.20	27 ft. 5 in.	112	6.15	144	32.40
13 ft. 5 in.	56	3.09	81	18.23	29 ft. 5 in.	120	6.60	153	34.43
15 ft. 5 in.	64	3.51	90	20.25					

Caldwell TANKS AND TOWERS

TANK GAUGES

Mercury Tank Indicator.

MERCURY TANK INDICATOR

It is connected to the tank by a small pipe, or can be connected to any existing pipe leading directly to the tank where the velocity of the water is not great enough to decrease the pressure.

Price each without mercury.....$96.00
Price of Mercury on application.

INDICATOR, GAUGE AND FLOAT

This Gauge is of wood, laid off in feet and parts of a foot, having a white background with three-inch figures painted thereon in black and is furnished with a brass chain for attaching the sliding gauge and a copper ball float with pulleys over which the chain runs.

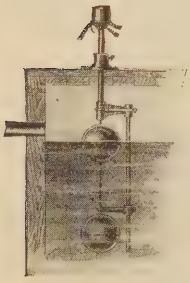
This is neat and substantial and inexpensive.

Indicator, Gauge and Float.

Price List for Indicator Gauge and Float for Wood Tanks

For Tanks 6 ft. and less in height	$ 7.05
For Tanks 7 ft. to 8 ft. in height (inclu.)	8.82
For Tanks 9 ft. to 10 ft. in height (inclu.)	11.46
For Tanks 11 ft. to 14 ft. in height (inclu.)	15.00
For Tanks 15 ft. to 18 ft. in height (inclu.)	19.41
For Tanks 19 ft. to 20 ft. in height (inclu.)	22.92
For Tanks 21 ft. to 24 ft. in height (inclu.)	26.46
For Tanks 25 ft. to 26 ft. in height (inclu.)	31.74
Extra for open top steel tank	2.25
Extra for steel tank with cover	6.75

CALDWELL'S TELL-TALE FLOATS

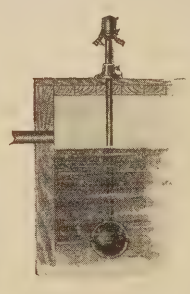


No. 1

High and Low Water Floats for Closed Tanks.

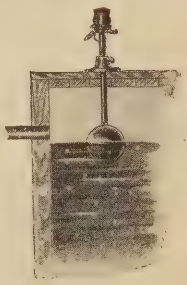
No. 2

High and Low Water Floats for Open Tanks.



No. 3

Low Water Floats.



No. 4

High Water Floats.

Price List of Floats with One Foot of Stem

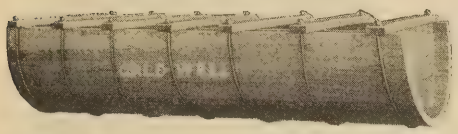
No wiring or batteries included.

No. 1.	For High and Low, closed tank	$23.40
No. 2.	For High and Low, open tank	23.40
No. 3.	For Low Hater, open or closed tank	13.65
No. 4.	For High Water, open or closed tank	13.65
Extra lengths of stem on single or double floats	per foot,	.78

State distance you want floats below top end of stave.
Write for discounts; also special, illustrated, descriptive circular.

SPECIAL ROUND WOOD TANKS

HALF-ROUND TANKS

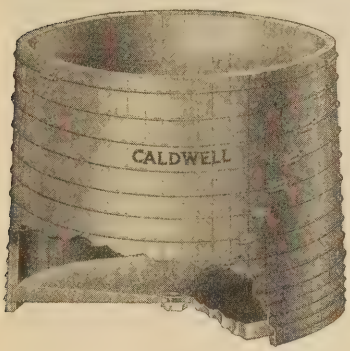


Furnished in any size wanted. State inside dimensions in asking for prices.

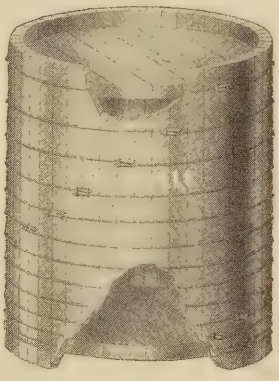
ELLIPTICAL TANKS

Furnished in any size. State inside dimensions in asking for prices. Note the short diameter should always be at least a little bit more than half the long diameter or the sides will be too flat for good stability.

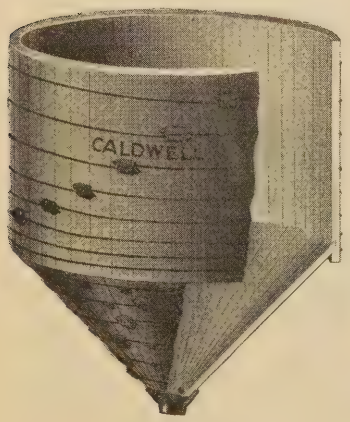
DISHED BOTTOM TANKS



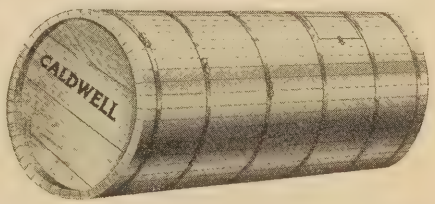
DOUBLE HEADED TANKS



CONE BOTTOM TANKS



HORIZONTAL OR ROUND WAGON TANKS



In asking for prices, be careful to give the outside diameter and length that can be used.

Caldwell TANKS AND TOWERS

TANK FOUNDATIONS

On the Ground or on Buildings

The importance of adequate and properly designed foundations is not fully appreciated by most people. *Poor foundations cause a great many tanks to leak.*

There are three cardinal principles to be observed in designing foundations.

1st. The weight must be supported from the bottom only. The staves of wooden tanks must not carry any of the load and where the tank is to rest on a level surface it is best to use dunnage or sub-joists as listed below which will support the bottom and raise the ends of the staves free.

2nd. The supporting pieces under the bottom must not be spaced over eighteen inches apart or preferably less and the bottom boards of wood tanks must run across the dunnage or joist supporting them.

3rd. The foundations must extend below the frost line when on the ground.

Realizing to what an extent the success of a tank depends on its foundation, we have made a careful study of tank foundations and have developed a series of standard designs which are not only of the proper strength but which contain the least amount of material that will develop this strength. The material has been put in the shape and place where it will do the most good.

We will furnish, when desired, a detail plan of foundations on the ground for the standard tanks we sell without extra cost and you can furnish your own materials or we can furnish the necessary wood joist and bridging cut to the proper lengths and ship them with the tank. See prices on the opposite page.

The placing of a tank on a building is a dangerous proceeding unless certain precautions are taken. If the building has not been especially designed to carry a tank, it should be examined and passed on for strength of walls, etc., by some reliable engineer or architect before attempting to put a tank on it. Any new brick work required should be set in cement mortar. The foundation itself is very important and should be designed *only* by some competent engineer *familiar with tank work*, as we find the *average* architect or engineer has not had the experience required, nor given the subject the close thought it deserves.

The design of tank supports has problems not usually found in other branches of engineering.

We are frequently asked to quote on designs of others and in most cases we either find some part of the structure too weak or, if of ample strength, the material was not placed economically. In a recent case our design cost less than one-half of that of the architect and was of equal strength.

Only round hoops should be used with a wood tank on a building.

Prices on application.

DUNNAGE OR SUB-JOISTS FOR TANKS

These prices are for the sub-joists only. Customers are sure of having these timbers fit the tank if ordered of us.

These are of Special Grade Long Leaf Southern Yellow Pine or Oregon Fir, cut to the proper circle to suit diameter of Tank, and are painted one coat.

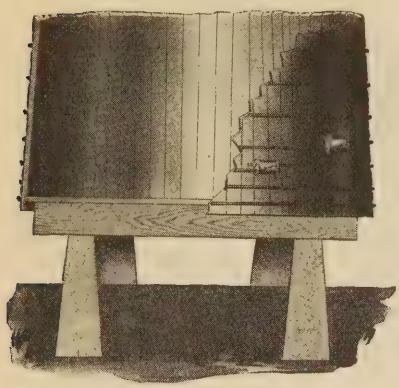
Prices on Sub-Joists

Inside Diam. of Tank	Weight Lbs.	Price	Inside Diam. of Tank	Weight Lbs.	Price
4 ft.	36	$ 2.97	12 ft. 6 in.	351	$13.70
5 ft.	48	3.21	14 ft.	495	19.32
6 ft.	60	3.51	16 ft.	648	25.26
7 ft.	102	3.99	18 ft.	807	31.47
8 ft.	120	4.68	20 ft.	921	35.91
10 ft.	273	10.65	22 ft.	1137	44.34
12 ft.	327	12.75	24 ft.	2100	81.90

Write for Discounts

Caldwell TANKS AND TOWERS

TANK FOUNDATIONS ON THE GROUND



The illustration shows our standard foundation for tanks on the ground. It consists of concrete walls with wood joists across them and have been designed so that no dunnage is necessary.

We give below prices on the woodwork only for these foundations which is of Special Grade Long Leaf Southern Yellow Pine or Oregon Fir cut to the proper lengths to suit.

Prices on Wood Joists Only

We send plans and specifications for the concrete foundation walls.

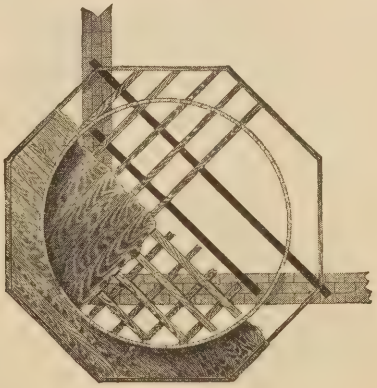
Inside Diam. of Tank	Weight Lbs.	Price	Inside Diam. of Tank	Weight Lbs.	Price
6 ft. 0 in.	147	$ 6.84	12 ft. 6 in.	945	$ 43.95
6 ft. 6 in.	162	7.53	14 ft. 0 in.	1221	56.79
7 ft. 0 in.	171	7.95	16 ft. 0 in.	1680	78.12
7 ft. 6 in.	180	8.37	17 ft. 0 in.	2085	96.96
8 ft. 0 in.	228	10.61	18 ft. 0 in.	2172	101.00
9 ft. 0 in.	324	15.04	20 ft. 0 in.	2310	107.42
10 ft. 0 in.	441	20.51	22 ft. 0 in.	2997	139.37
12 ft. 0 in.	918	42.69	24 ft. 0 in.	3213	149.40

Write for Discounts

STANDARD DUNNAGE OR SUB-JOISTS

Cut shows tank bottom being laid on Dunnage. Circle of Dunnage should be about 4 inches less than tank bottom.

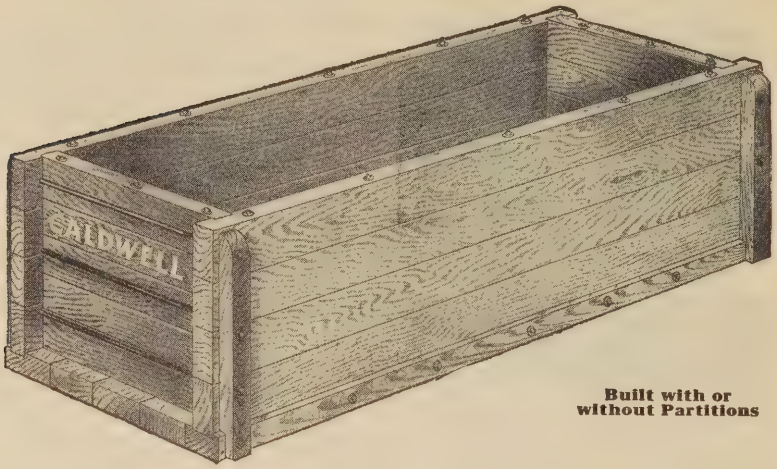
TANK FOUNDATION ON BUILDING



On Corner Walls

Caldwell TANKS AND TOWERS

RECTANGULAR WOODEN TANKS



Built with or without Partitions

In the construction of Rectangular Tanks, a greater amount of mechanical knowledge and experience is necessary than in Round Tanks and there is no standard practice that is readily accessible to the uninformed, as with Round Tanks, so that besides ourselves, there are **practically** only one or two other concerns that successfully build this kind of a tank.

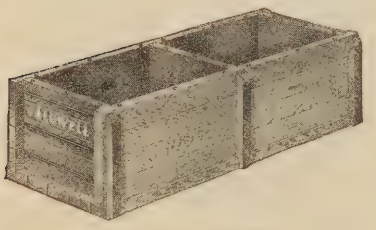
We can furnish this style of tank with or without partitions, false bottoms, etc., or with lead, copper or other lining when required. We can furnish brass, copper, bronze, galvanized, lead covered or Monel Metal rods instead of iron and, when required, we counter-sink the nuts on top and cover with a hardwood coping.

SIZES

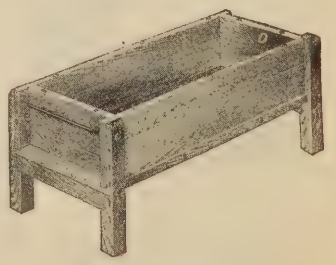
There are so many possible sizes of rectangular tanks that we do not attempt to list them and will quote, on application, prices for any size you wish. Standard lengths of lumber are in even feet and will make rectangular tanks of about one foot less length, so for economy, the odd feet or slightly less should be selected for the length of the tank and the other dimensions to give the required capacity.

KIND OF WOOD

For the kind of wood to use for different purposes see page 2.



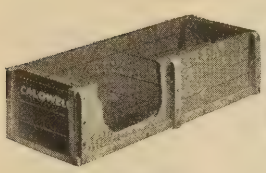
Tank with Partition



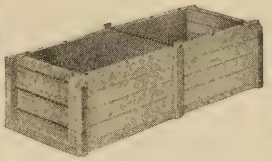
Sink or Washing Vat

Caldwell TANKS AND TOWERS

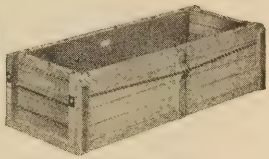
RECTANGULAR WOODEN TANKS—Continued



Brace Rods Through Center



Brace Rods Over Top



Outside Truss Bracing

CONSTRUCTION

We have been building this style of tank for a great many years and were the first to adopt a standard method of construction which we have reason to believe, from long experience, is about the best possible method.

The bottom is crozed (or grooved) to receive the sides and ends and the sides are crozed to receive the ends. This gives a water tight wedged joint even without the pressure of the rods which are used to draw all parts tightly together and this croze also holds the sides and ends from bulging at the bottom.

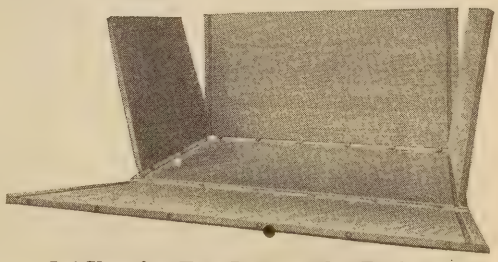
The rodding is thorough and the sizes and spacings are carefully figured out by our engineering department to give a full factor of safety of 4 to 1 with the liquid used so that no bursting or bulging is possible.

When the length exceeds certain proportions for each thickness the sides are braced against bulging. The simplest and best method is by rods through the center of the tank and is used where their presence is not an objection; otherwise, by battens in the center with a rod passing over the top and another through the bottom of the tank. Still another method is to truss the sides on the outside by iron rods, or by a wood truss if the iron is objectionable. See illustrations above of the three methods.

We also make these tanks with rounded or tapered bottoms, sides or ends or to fit machines of which they are a part, such as dyeing or paper machines. See page 19 for illustration of rectangular acid pickling tank.

SHIPPING AND ERECTION

Rectangular tanks can be shipped set up but, on account of higher freight rates, they usually are shipped knocked down. The sides, ends and bottoms are each put together and shipped in one section except in very large sizes when such pieces would be too large or heavy to handle. All holes for rods are bored and rods put in place with blocks on the ends of the thickness of the part they have to pass through. Customer in receiving Tank has only to take off blocks and nuts and after dressing off a thin shaving (just enough to make a tight fit into the grooves) on inside of side and ends, which takes only a few minutes, let them down into the groove in the bottom, place the battens in position, put the washers and nuts back in place, and then draw the rods up. The sides and ends are left the least bit thicker than the groove in bottom to allow for shrinkage in transit, and to permit of an exact fit in erecting.



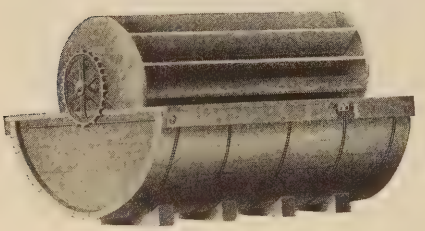
Cut Showing How Rectangular Tanks are Manufactured Ready to Go Together

Caldwell TANKS AND TOWERS

INDUSTRIAL TANKS

We are designing engineers and can design and give you estimates on any equipment even including complete plants. We specialize on tanks of individual design or with mechanical attachments. We can also furnish linings of lead, rubber, monel or other metals or complete tanks of stainless steel, nickel, bronze, etc.

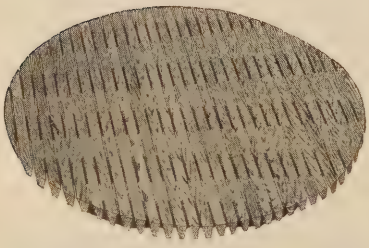
TANNERS' TANKS



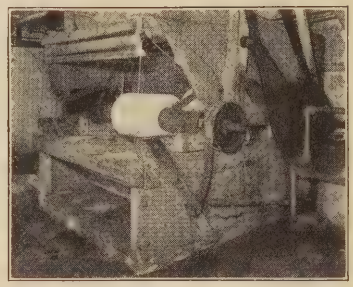
Round Vat with Paddle Wheel

Drum with Drive

TEXTILE TANKS

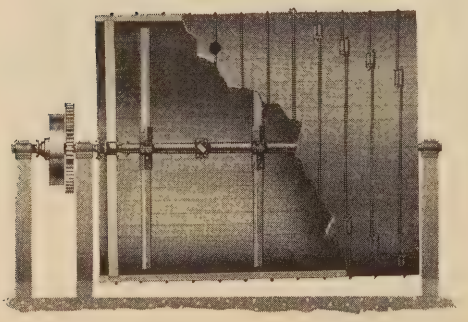


False Bottoms—Slotted, Perforated or Plain



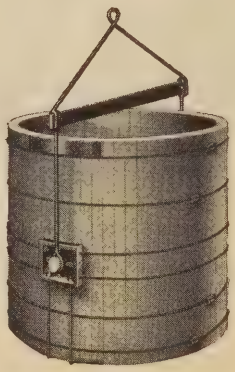
Bleaching Tank—Lead Lined

PAPER MILL TANKS



Horizontal Stuff Chest with Agitator

ENAMELERS' TANK

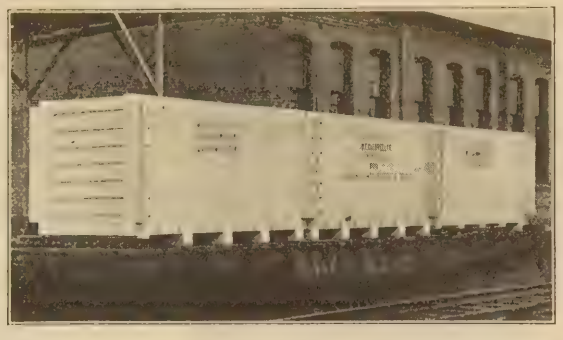


Tank with Trunions and Bale

INDUSTRIAL TANKS

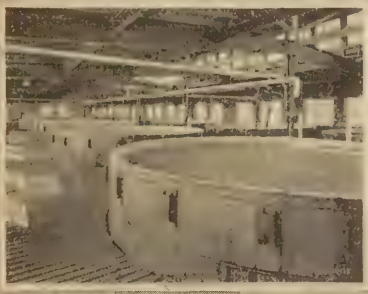
VINEGAR GENERATOR

GALVANIZER'S TANKS



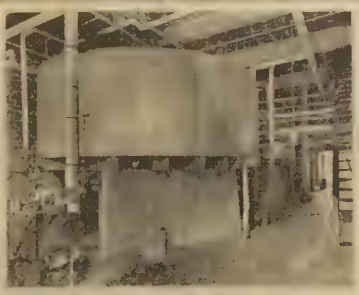
HEAVY YELLOW PINE ACID PICKLING TANKS

DISTILLERY TANKS



FERMENTERS
Frankfort Distillery Co.

YEAST TUBS
Brown-Forman Distillers Co.

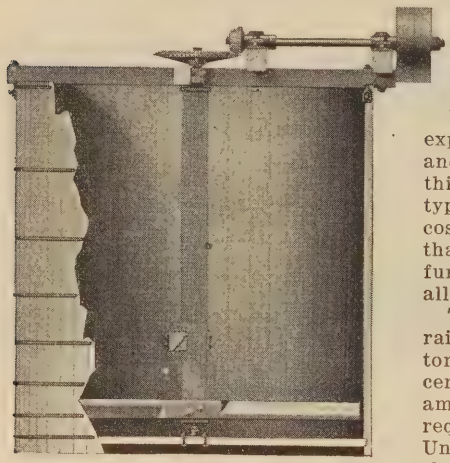


MASH TUB
Stitzel Weller Distillery

WEIGH HOPPERS
Stitzel Weller Distillery

Caldwell TANKS AND TOWERS

TANK AGITATORS OR STIRRING DEVICES



BELT DRIVEN PADDLE TYPE WOOD AGITATOR

Tank agitators are of many types to suit the many different materials and conditions encountered and we are prepared to furnish most any type needed.

We have found from our long experience that in most instances and particularly liquids and even thick solutions the simple paddle type illustrated is best suited, costs less and is more efficient than any other type. We have furnished more of this type than all others together.

The action of this agitator is to raise the material from the bottom up the sides and down the center with only the minimum amount of turbulence and swirl required for thorough mixing. University laboratory tests have shown it surprisingly efficient and also that it should be driven at the proper speed to get the maximum efficiency.

The standard paddle agitator may consist of either a Fir or Yellow Pine wood vertical shaft with beveled wood stirrer arms fastened on with brass or other resistant metal bolts and step and toe bearing of suitable metal or where no damage will result to the contents or agitator, of steel shaft and arms with cast step and toe.

The standard and least expensive drive is by heavy cast bevel gears, steel shaft and cast iron tight and loose pulleys mounted on framed Yellow Pine bridgetrees.

Steel bridgetrees, unit drive in a cast frame, sprocket, jaw clutch, Caldwell Friction Clutch or direct gearmotor drive may be used at added cost. See illustrations.

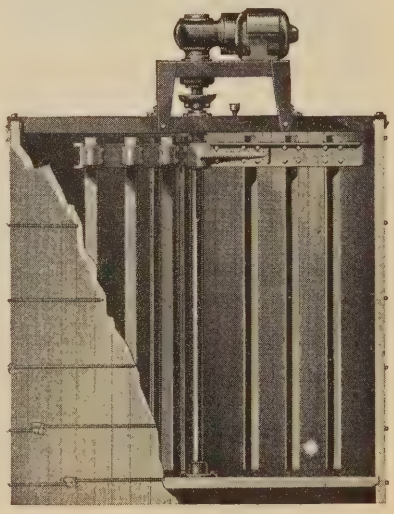
The standard range of sizes are of sufficient strength to handle quite thick materials but special designs can be made to suit any requirements.

This agitator is made to fit either wood or steel tanks and all parts are fitted ready to assemble and fit to the tank. Any good mechanic can do this easily from the blueprint we furnish.

OTHER TYPES

There are many other types and we illustrate those in most common use. They are mostly for special purposes and designed for each case. The toothed agitator shown is used in distillery yeast and mash tubs in connection with cooling coils.

Tell us the size tank, the results desired and the kind and consistency of the material to be stirred.

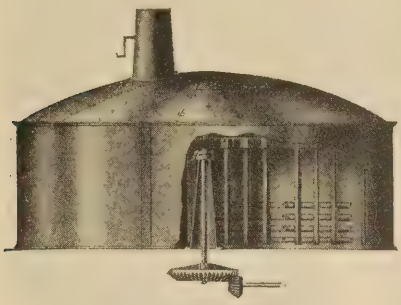


DIRECT GEARMOTOR DRIVEN TOOTH AGITATOR

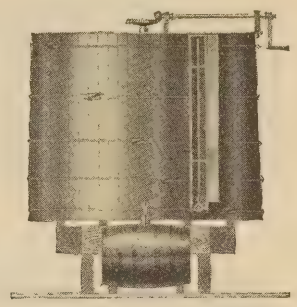
TANK AGITATORS OR STIRRING DEVICES

We manufacture all parts of our agitators in our own machine, millwright, structural and plate shops and iron and special metal foundries.

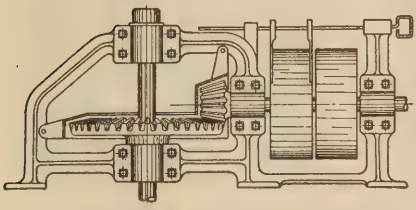
We also manufacture a complete line of power transmission machinery including the Caldwell Friction Clutch described below. Send for special catalog.



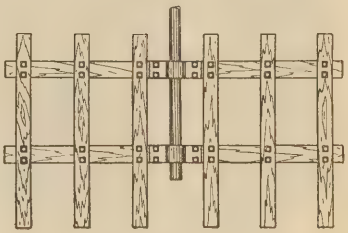
DISTILLERY MASH TUB



HAND MIXING TANK
With Glass Gauge



UNIT DRIVE IN CAST FRAME

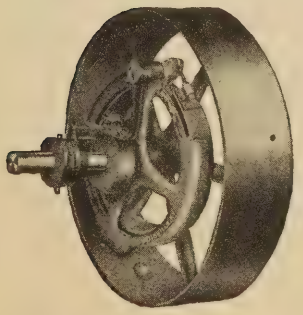


GATE AGITATOR

PUG MILL

BRONZE PROPELLER

CALDWELL FRICTION CLUTCHES



We have been manufacturing this clutch for a number of years and believe it excels any other on the market. It is made in capacities from 1 to 240 horsepower.

Its notable features are its simplicity, strength, ease and perfection of adjustment and freedom from breakage.

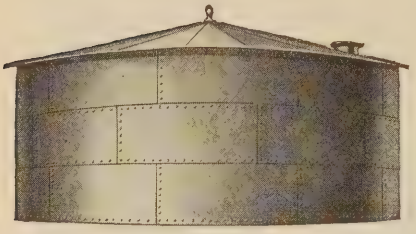
The basic principle is identical with that of the standard automobile service brake; a flexible band lined with asbestos and tightened with a single lever. In practice it has given equal service with that much used and abused device.

There are only eleven parts.

There is only one adjustment. One screw shortens or lengthens the band which gives equal pressure everywhere around the entire circumference of the friction band.

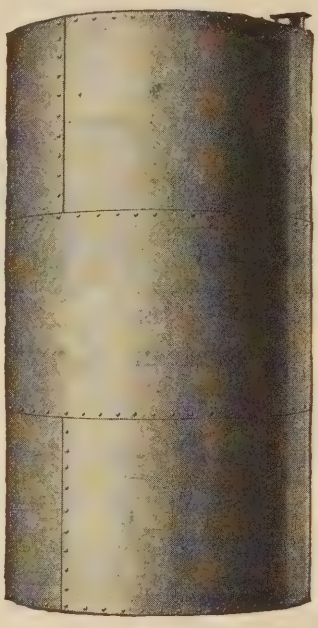
VERTICAL STEEL TANKS

For Storage of Water, Oil, Turpentine, Etc.



Oil Field or Suction Tanks

Standard Flat Bottom Tank



Set Up Welded and Riveted Tanks

A FEW STANDARD SIZES

Prices on Application

Std. Flat Bottom Tanks

Gallons	Diameter in Feet	Height in Feet
588	5	4
1057	6	5
1268	6	6
1612	6½	6½
2256	8	6
3008	8	8
4699	10	8
5874	10	10
8459	12	10
10151	12	12
13816	14	12
16118	14	14
21055	16	14
24062	16	16
26646	18	14
30453	18	16
34259	18	18
42300	20	18
47000	20	20
47493	22	16

Std. Flat Bottom Tanks

Gallons	Diameter in Feet	Height in Feet
51180	22	18
60908	24	18
74444	24	22
81211	24	24
106254	26	26
100000	30	19
126859	30	24
158619	30	30

Insurance Suction Tanks Fact. Mut. Spec.

Gallons	Diameter in Feet	Height in Feet
50000	22	18
100000	28	22
200000	34	30
300000	42	30
400000	44	35¾
500000	50	34½

Set Up Welded Tanks

Gallons	Diameter in Feet	Height in Feet
7800	10½	12
11700	10½	18
15600	10½	24
20700	10½	32

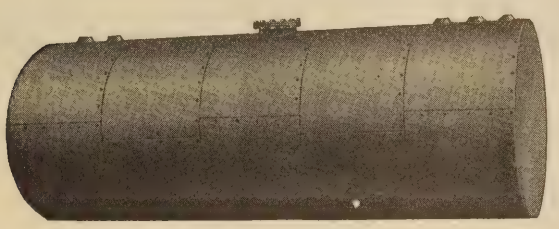
Oil Field Tanks A. P. I. Sizes

Barrels	Diameter in Feet	Height in Feet
100	8	10
240	12	12
540	18	12
1440	24	17¾
2240	30	17¾
5400	36	29½
9500	48	29½
25000	78	29½
51000	102	35
101000	144	35

Caldwell TANKS AND TOWERS

HORIZONTAL STEEL STORAGE TANKS

Riveted and Welded, or Riveted Construction



For the storage of gasoline, oils or other liquids above or below ground.

HORIZONTAL STEEL STORAGE TANKS

Standard Sizes

Capacity Approx. Gallons	Size		Thickness of Plate		Approx. Weight, Lbs.	List Price Each	Steel Supports for Horizontal Tanks				
	Diam.	Length	Shell	Head			No.	Wt.,	7′-0″ High	Wt.,	10′-0″ High
5000	72″	23′— 8″	3/16″	1/4″	4290	484.10	2	980	130.30	1280	161.00
*5000	72″	23′— 8″	1/4″	1/4″	5530	569.10	2	980	130.30	1280	161.00
*5000	84″	17′— 8″	1/4″	5/16″	5140	545.80	2	1000	132.30	1300	163.00
*6000	96″	16′— 2″	1/4″	5/16″	5800	588.40	2	1080	139.60	1380	169.50
*8000	96″	21′— 6″	1/4″	5/16″	7010	713.60	2	1080	139.60	1380	169.50
*10000	96″	26′—10″	1/4″	5/16″	8460	835.20	2	1080	139.60	1380	169.50
*10000	120″	17′— 0″	1/4″	5/16″	7440	748.70	2	1200	156.70	1500	187.60
*10000	120″	17′— 0″	5/16″	5/16″	8780	815.00	2	1200	156.70	1500	187.60
*12000	120″	20′— 6″	1/4″	5/16″	8800	897.90	2	1200	156.70	1500	187.60
*12000	120″	20′— 6″	5/16″	5/16″	10180	970.20	2	1200	156.70	1500	187.60
15000	120″	25′— 8″	1/4″	5/16″	10530	1055.10	2	1200	156.70	1500	187.60
*15000	120″	25′— 8″	5/16″	5/16″	12250	1117.40	2	1200	156.70	1500	187.60
20000	120″	34′— 2″	1/4″	5/16″	13430	1344.20	3	1900	246.40	2400	293.90
*20000	120″	34′— 2″	5/16″	5/16″	15680	1444.90	3	1900	246.40	2400	293.90
23000	120″	39′— 3″	5/16″	5/16″	17680	1576.20	3	1900	246.40	2400	293.90
*23000	120″	39′— 3″	3/8″	3/8″	21630	1811.20	3	1900	246.40	2400	293.90
*10200	126″	15′— 9″	1/4″	5/16″	7530	769.40	2	1200	156.70	1500	187.60
*10200	126″	15′— 9″	5/16″	5/16″	8600	830.30	2	1200	156.70	1500	187.60
*12000	126″	18′— 7″	1/4″	5/16″	8630	899.30	2	1200	156.70	1500	187.60
*12000	126″	18′— 7″	5/16″	5/16″	9920	972.20	2	1200	156.70	1500	187.60
15000	126″	23′— 2″	1/4″	5/16″	10220	1055.30	2	1200	156.70	1500	187.60
*15000	126″	23′— 2″	5/16″	5/16″	11840	1087.80	2	1200	156.70	1500	187.60
20000	126″	31′— 0″	1/4″	5/16″	12980	1215.90	3	1900	246.40	2400	293.90
*20000	126″	31′— 0″	5/16″	5/16″	15080	1301.50	3	1900	246.40	2400	293.90
25000	126″	38′— 7″	1/4″	5/16″	15600	1431.40	3	1900	246.40	2400	293.90
25000	126″	38′— 7″	5/16″	5/16″	18320	1517.00	3	1900	246.40	2400	293.90
*25000	126″	38′— 7″	3/8″	3/8″	22530	1932.10	3	1900	246.40	2400	293.90
30000	126″	46′— 4″	1/4″	5/16″	18450	1673.00	4	2600	336.00	3300	360.20
30000	126″	46′— 4″	5/16″	5/16″	21670	1972.10	4	2600	336.00	3300	360.20
*30000	126″	46′— 4″	3/8″	3/8″	26430	2228.10	4	2600	336.00	3300	360.20

All tanks listed meet Underwriters' Specifications for above ground. Those marked * for underground.

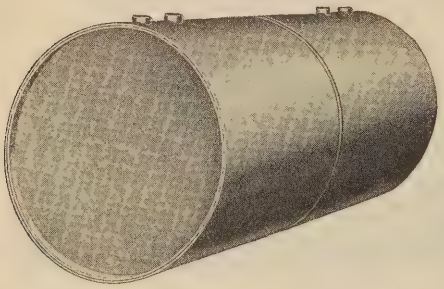
A standard 16-inch manhole and five 3-inch connections or equivalent are furnished on each tank.

Write for Discounts

Caldwell TANKS AND TOWERS

FILLING STATION AND OIL BURNER TANKS

GALVANIZED OR BLACK WELDED



Underground Tanks for the storage of gasoline and other oils.

Can be furnished with Underwriters' labels.

GALVANIZED

Gallons	Diameter, Inches	Length, Inches	Thickness	Shipping Weight, Lbs.	Minimum Car Load	List Price Each
64	26	30	No. 14	85	144	$ 36.00
125	33	36	No. 14	135	117	40.00
280	42	48	No. 14	220	60	48.00
550	42	93	No. 14	360	30	68.00
550	46	78	No. 12	475	30	82.00
1000	46	144	No. 12	770	18	124.00

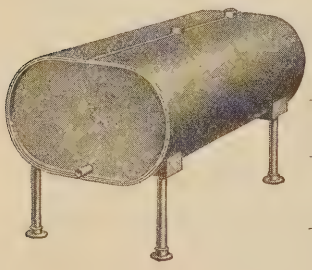
BLACK

280	42	48	No. 12	310	60	$ 44.00
550	48	72	No. 12	440	30	62.00
550	48	72	$\frac{3}{16}$″	800	20	80.00
1000	48	128	$\frac{3}{16}$″	1270	15	120.00
1000	64	72	$\frac{3}{16}$″	1150	18	112.00
1500	64	108	$\frac{3}{16}$″	1500	14	150.00
2000	64	144	$\frac{3}{16}$″	1950	9	180.00
3000	64	216	$\frac{3}{16}$″	2750	6	256.00

Standard openings are one 3½″, one 2″ and one 1″.
Bulkheads quoted upon application.
Extra for standard 16″ manhole $16.00

Fittings for underground tanks:

2″ Galvanized Fill Pipe with Cap	$ 3.00
3″ Galvanized Fill Pipe with Cap	5.20
2″ Fill Cap	1.00
3″ Fill Cap	1.50
Brass Padlock and Keys	1.00
1½″ Galvanized Suction Stub with Bushing	3.40
1½″ Galvanized Suction Stub with Bushing and Foot Valve	11.50
Double Tapped Bushing	.70
Gauge Stick	1.50



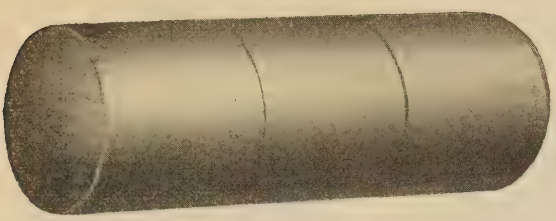
OBROUND BASEMENT TANKS

Capacity, Gallons	Size, Inches	Thickness Black Steel	Weight, Lbs.	List Price
250	26x42x60	14 ga.	200	$28.00
250	26x42x60	12 ga.	260	31.50
275	26x42x66	14 ga.	220	30.00
275	26x42x66	12 ga.	285	33.00

Extra for four lugs for 1½″ pipe legs.....$2.00
Extra for float gauge 3.50

Write for Discounts

Caldwell TANKS AND TOWERS



PNEUMATIC AND HOT WATER TANKS

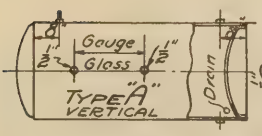
BLACK WELDED

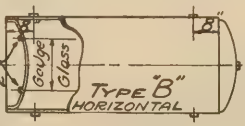
STANDARD SIZES

Size and Capacity			Standard Working Pressure 75 Lbs. Tested at 115 Lbs.		Extra Heavy Working Pressure 100 Lbs. Tested at 150 Lbs.	
Diam., Inches	Length, Feet	Gallons	Weight	List Prices	Weight	List Prices
20 x	4	66	235	$ 43.10	245	$ 46.80
20 x	5	85	280	47.70	290	51.40
24 x	4	100	290	50.00	300	56.90
24 x	5	120	340	56.00	350	62.90
24 x	6	140	390	62.00	400	68.90
30 x	4	150	390	65.60	405	75.70
30 x	5	180	455	73.40	470	83.50
30 x	6	220	520	81.20	535	91.30
30 x	7	250	585	89.00	600	99.10
30 x	8	295	650	96.80	665	106.90
36 x	6	315	650	95.60	785	121.20
36 x	7	365	725	104.70	880	134.90
36 x	8	420	800	114.80	975	148.70
36 x	10	525	925	135.90	1165	176.30
42 x	6	430	820	126.70	990	158.40
42 x	7	500	910	139.50	1100	174.90
42 x	8	575	1000	152.40	1210	191.40
42 x	10	720	1180	178.10	1430	224.50
42 x	12	865	1360	203.80	1650	257.50
42 x	14	1000	1540	229.50	1870	290.50
48 x	8	750	....	.....	1435	234.10
48 x	10	940	....	.....	1690	273.60
48 x	12	1130	....	.....	1945	313.00
48 x	14	1300	....	.....	2200	352.50
48 x	16	1500	....	.....	2455	392.00
48 x	18	1700	....	.....	2710	431.50

Prices on Galvanized Tanks quoted on application.
Extra for standard manhole in head, $36.00; in shell, $54.00.
Extra for standard handhole, $10.00.

PNEUMATIC

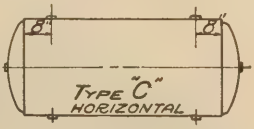




Tappings
20″, 24″ and 30″—1″ dia.
36″—1¼″ dia.
42″—1½″ dia.
48″—2″ dia.
60″ and 72″—3″ dia.

Gauge Glass C to C
20″ and 24″—13½″.
30″—15½″.
36″—17½″.
42″—21½″.
48″—25½″.
60″ and 72″—31½″.

HOT WATER



Tappings
20″ and 24″—1½″ dia.
30″, 36″ and 42″—2″ dia.
48″, 60″ and 72″—3″ dia.

RECTANGULAR STEEL TANKS

Riveted or Welded

Open or Closed

There are no standard sizes of rectangular steel tanks as they are usually made to suit special requirements. The smaller sizes are usually welded and shipped set up while the larger sizes are usually riveted and shipped knocked down, thoroughly marked and with rivets to erect.

We make them of any size and any suitable thickness. The sides and ends are thoroughly braced by angles, bars or rods wherever required to prevent bulging.

Write for net prices including freight to your city.

GALVANIZED STEEL TANKS

RELIABLE GALVANIZED ROUND STORAGE TANKS

These capacities are not meant to be absolutely exact, but reasonably close. Measurements all outside.

We can furnish these Tanks in any size wanted.

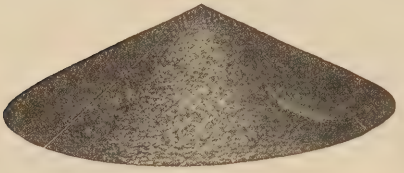
Prices do not include covers. When required they will be supplied at proportionate additional prices. See below.

List prices of all Tanks are based on No. 20 Gauge. For Tanks 6 feet diameter, 6 feet high, to 8 feet diameter, 8 feet high, inclusive, we recommend No. 18 Gauge; for Tanks 10 feet diameter, 8 feet high and 10 feet diameter, 10 feet high, No. 16 Gauge; for Tanks 12 feet diameter, 10 feet high, and 12 feet diameter, 12 feet high, No. 14 Gauge. Larger Tanks No. 12 and No. 10 Gauge. No. 18 Gauge increases the price 30 per cent; No. 16, 60 per cent; No. 14, 90 per cent; No. 12, 140 per cent; No. 10, 200 per cent.

No.	SIZE Dia. ft.	SIZE Ht. ft.	Capacity Gallons	List Price for 20 Ga.	
200	2	2	47	$ 7.44	Can be shipped S. U.
201	2½	2½	78	11.55	
202	3	2	91	14.85	
203	3	3	157	18.99	
204	3	4	220	22.29	
205	4	2	166	18.15	
206	4	2½	215	20.63	
207	4	3	254	23.10	
208	4	4	338	27.24	
209	4	5	423	31.35	
210	4	6	508	36.30	
211	4	8	688	46.20	
212	5	2	262	23.93	
213	5	2½	342	26.40	
214	5	3	411	28.88	
215	5	4	500	34.65	
216	5	5	675	42.09	
217	5	6	810	47.85	
218	5	8	1096	59.40	
219	6	2	384	30.53	
220	6	2½	480	33.00	
221	6	3	583	35.48	
222	6	4	786	42.90	
223	6	5	1000	49.50	
224	6	6	1200	66.00	
225	6	8	1600	80.85	
226	6½	6½	1500	73.11	
227	8	2	691	46.20	
228	8	2½	864	49.50	
229	8	5	2000	82.50	
230	8	6	2400	92.40	
231	8	8	3000	118.80	
232	8	10	3592	133.65	
233	10	2	1089	64.35	
234	10	2½	1361	69.30	
235	10	8	4500	156.75	
236	10	10	6000	181.50	
237	10	12	7000	214.50	
238	12	12	10000	272.25	
239	14	14	15000	321.75	
240	16	14	20000	354.75	
241	16	16	23000	404.25	Must be shipped K. D.

GALVANIZED TANK COVERS

CONICAL



FLAT

Style "F"

Prices

Diameter of Tank	Conical Cover No. 20 Ga.	Flat Cover No. 20 Ga.	Diameter of Tank	Conical Cover No. 20 Ga.	Flat Cover No. 20 Ga.
4 ft...	$ 9.60	$ 8.40	10 ft...	$60.00	$52.50
5 ft...	15.00	13.13	12 ft...	86.40	75.60
6 ft...	21.60	18.90	14 ft...	117.60	102.90
7 ft...	29.40	25.73	16 ft...	153.60	134.40
8 ft...	38.40	33.60			

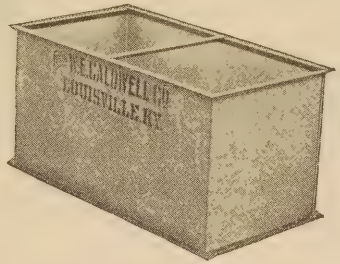
Covers 10 foot diameter and over should be at least No. 18 gauge which is 30% more than above prices.

Style "B"

Caldwell TANKS AND TOWERS

GALVANIZED STEEL TANKS

RELIABLE GALVANIZED STEEL RECTANGULAR TANKS



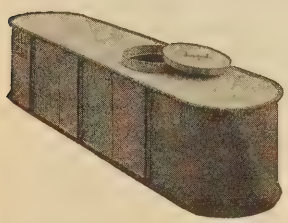
Round End Price List

No.	L'gth Feet	W'th Feet	Ht. Feet	Capacity Gals.	List Price 20 Ga.
300	4	1-6	1	40	$ 9.75
301	4	2	1	50	10.73
302	4	2	2	91	14.85
303	5	1-6	1	50	12.23
304	5	2	1	70	12.98
306	5	2	2	140	16.95
307	6	2	1	80	14.63
309	6	2	2	144	18.99
311	8	1-6	1	80	17.10
312	8	2	1	110	18.53
314	8	2	2	197	23.52
315	8	2	2-6	246	27.30
316	8	2-6	2	245	25.35
318	8	3	2	298	28.05
319	8	3	2-6	372	31.20
320	8	4	2	386	30.54
321	8	4	2-6	482	39.00
322	8	4	3	578	42.90
325	10	2	1	140	23.40
329	10	3	2	384	32.76
330	10	3	2-6	480	39.00
331	10	3	3	576	46.32
332	10	4	2	496	37.95
333	10	4	2-6	620	46.80
334	10	4	3	744	55.58
343	16	4	2	826	61.89

Square End Price List

No.	L'gth Feet	W'th Feet	Ht. Feet	Capacity Gals.	List Price 20 Ga.
400	4	1	1	29	$10.73
401	4	2	1	58	12.68
402	4	2	2	101	15.69
403	5	1	1	37	12.23
404	5	2	1	74	14.63
405	5	2	2	148	18.53
406	6	2	1	89	16.58
407	6	2	2	152	19.38
408	8	1	1	58	16.58
409	8	2	1	119	20.48
410	8	2	2	202	26.40
411	8	2	2-6	253	35.10
412	8	2-6	2	262	28.89
413	8	3	2	318	30.93
414	8	3	2-6	397	39.98
415	8	4	2	424	37.95
416	8	4	2-6	530	48.75
417	8	4	3	636	51.48
418	10	2	1	149	24.38
419	10	3	2	397	36.30
420	10	3	2-6	496	47.78
421	10	3	3	595	52.20
422	10	4	2	530	41.25
423	10	4	2-6	662	56.10
424	10	4	3	795	61.95
425	16	4	2	945	67.65

We Can Furnish These Tanks in Any Size Wanted



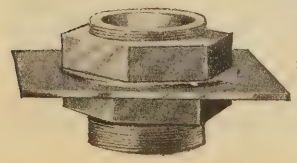
ROUND END WAGON TANK

No.	Width Feet	Height Feet	Length Feet	Capacity Gallons	Weight Pounds	Price
A	3	2	10	378	245	$53.63
B	3	2	8	295	215	48.68
C	2½	2	8	245	203	45.38
D	2	2	8	197	183	41.25
E	2	2	6	144	146	36.30

Order by number.

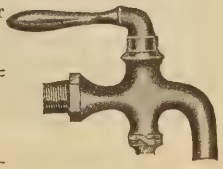
PIPE CONNECTIONS AND FAUCET

GALVANIZED LOCK NUT AND NIPPLE CONNECTION



BRASS FAUCET

With or without threaded end for hose connection.



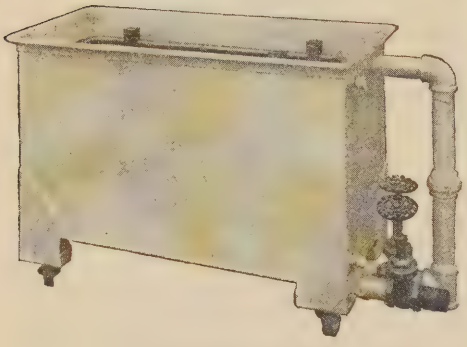
Prices

$1.15	¾ inch	$ 2.70
1.50	1 inch	3.78
2.25	1½ inch	9.36
3.00	2 inch	16.74

SPECIAL STEEL TANKS

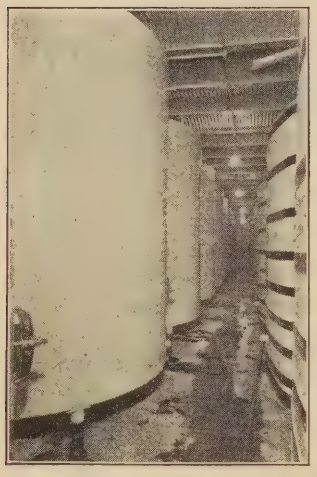
EIGHT 75 TON BINS
Corhart Refractories Co.

CLAY BINS
W. Va. Brick Co.
Caldwell Friction Clutch in foreground.



PORTABLE MONEL METAL TANK
International Nickel Co.

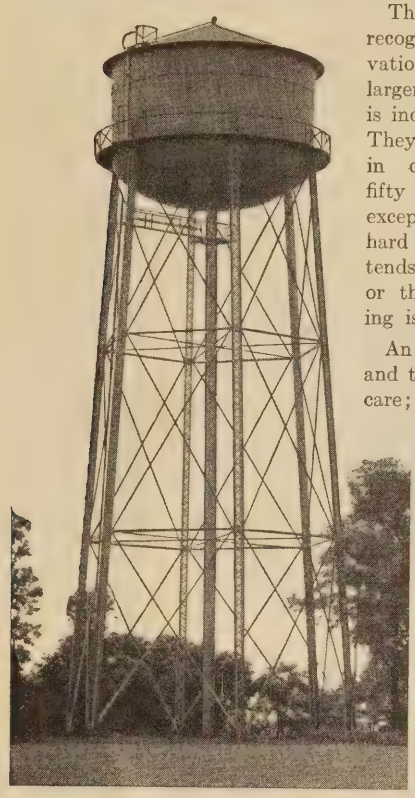
GRAIN BINS



FERMENTERS
Frank Fehr Brew Co.

MASH STRAINER TANK

ALL STEEL HEMISPHERICAL AND ELLIPSOIDAL BOTTOM TANKS AND TOWERS



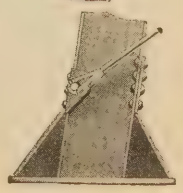
The all steel tank and tower is now the recognized type for storing water at an elevation. This is particularly true for the larger capacities as the cost of wood tanks is increasingly greater as the size increases. They are not economical compared to steel in capacities above fifty thousand gallons, except in cases where hard or acid water tends to pit the steel or the cost of heating is a factor.

An all steel tank and tower needs little care; only a coat of paint every three to five years depending on local conditions and the furnishing of heat in severe weather. When once tight it stays tight, even when out of use, and therefore should always be used for intermittent service.

A tank and tower is superior to other methods of storing water as the entire capacity is available at not less than a fixed minimum. The pressure is supplied by gravity, an unfailing force which is superior to pumps or any mechanical source of pressure. For this reason tanks and towers are used for such services as city water works and automatic fire sprinklers where reliability is most important and are almost always all steel.

We specialize in tanks and towers for these two services as well as for other classes of water supply.

Our tanks and towers are accepted by all insurance inspection bureaus and they are to be found in most every state in the Union as well as in Canada, Mexico and other foreign Countries.



Caldwell TANKS AND TOWERS

ALL STEEL TANKS AND TOWERS

The names of city and town water works for which we have furnished tanks and towers are listed on page 35. Some of these are more than twenty-five years old and still in service.

Industrial water supply is another important use and we are proud of the nationally known names on our list of customers, many of whom have several of our tanks and towers in service. Industrial water supply can be combined with sprinkler service, especially when large risers are used, as insurance authorities accept dual service installations where a separate pipe allows the use of the upper portion of the capacity for industrial use and still reserves the required capacity for fire protection.

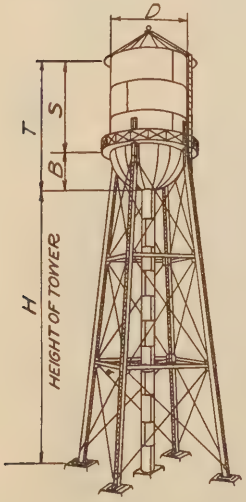
The hemispherical bottom type is to be preferred for all ordinary uses except in very large sizes or where variation in water pressure must be kept at a minimum. In such cases the ellipsoidal bottom type is to be preferred.

The hemispherical shape is ideal for a suspended bottom for it carries the load with the minimum amount of stress in itself and does not produce unusual stresses in other parts of the tank. For this reason it will carry the same load with thinner plates than is required in the ellipsoidal shape. The actual stresses can be more accurately calculated as the curvature is uniform throughout and they are less affected by other parts of the tower.

The large steel plate risers, three feet and over in diameter, are used with either type without expansion joints and carry part of the water load. We recommend them in preference to wrought or cast iron pipe with wood frost casings for they do not need such casings and the elimination of the wood is a decided advantage. Their large size prevents their freezing easily and the heater can be placed inside the riser and delivers heat where it is most needed.

The matter of appearance and proportion is given prime consideration in designing, for we want each outfit to be an ornament for you and an advertisement for us.

See pages 32 and 33 for smaller sizes with Angle Towers.



HEMISPHERICAL BOTTOM TANKS

Standard Sizes

Capacity	Diam.	Side S	Depth T	Bal.	No. Posts
3,000	8′	5′— 5″	9′— 5″	18″	4
5,000	8′	10′—10″	14′—10″	18″	4
10,000	10′	13′— 9″	18′— 9″	18″	4
15,000	12′	13′— 9″	19′— 9″	18″	4
20,000	14′	12′— 9″	19′— 9″	18″	4
25,000	14′	17′— 1″	24′— 1″	18″	4
30,000	16′	14′— 9″	22′— 9″	24″	4
35,000	16′	18′— 1″	26′— 1″	24″	4
40,000	16′	21′— 7″	29′— 7″	24″	4
50,000	18′	20′— 3″	29′— 3″	24″	4
60,000	20′	18′—11″	28′—11″	24″	4
75,000	20′	25′— 5″	35′— 5″	24″	4
100,000	24′	21′— 7″	33′— 7″	30″	4
125,000	24′	29′— 0″	41′— 0″	30″	4
150,000	26′	29′— 2″	42′— 2″	36″	4
175,000	28′	28′— 9″	42′— 9″	36″	4
200,000	28′	34′— 2″	48′— 2″	36″	4
250,000	32′	30′—11″	46′—11″	36″	6
300,000	34′	32′—11″	49′—11″	36″	6
500,000	40′	40′— 0″	60′— 0″	36″	6

Caldwell TANKS AND TOWERS

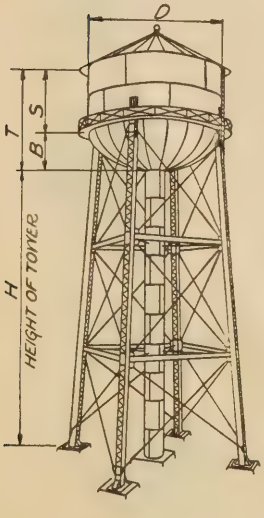
ALL STEEL TANKS AND TOWERS

We have been building this type of tank and tower for nearly thirty years and are prepared to design or make it in any size under our own or your engineers specification.

We use only the very latest and best practice in our designs and shop methods. We are especially proud of the quality and accuracy of our workmanship. We insure proper fitting in the field by accurate layout and processes in the shop. This gives you a better job and saves us expensive correction of errors in the field. Each size bottom, for instance, is set up in the shop and the template is corrected until all holes fit without reaming. Note illustration below. We also set up all special construction to insure proper fit. The reports of our erectors prove the wisdom of this policy.

We can make these towers in any height required, but the usual heights are 50, 75 and 100 feet. We carry material in stock to make most any capacity or height desired and we also carry parts for the usual standard sizes in stock all finished. It is impossible to give list prices for this type of tank and tower on account of the multiplicity of sizes and constant variation in the cost of materials.

We will gladly send you a detailed quotation including erection and freight on any size you wish with prices on all accessories you might want. We will also include drayage and foundations if desired, but these can usually be more economically attended to by the purchaser.



ELLIPTICAL BOTTOM TANKS

Standard Sizes

Capacity	Diam. D	Side S	Total T	Balcony	No. Posts
20,000	16′	10′— 9″	14′— 9″	18″	4
25,000	18′	10′— 3″	14′— 9″	18″	4
30,000	18′	12′—11″	17′— 5″	18″	4
35,000	20′	11′— 9″	16′— 9″	24″	4
40,000	20′	13′—11″	18′—11″	24″	4
50,000	22′	13′—11″	19′— 5″	24″	4
60,000	24′	13′—11″	19′—11″	24″	4
75,000	26′	14′— 9″	21′— 3″	24″	4
100,000	30′	13′—11″	21′— 5″	24″	4
125,000	30′	18′— 9″	26′— 3″	24″	4
150,000	34′	16′— 7″	25′— 1″	24″	6
175,000	36′	17′— 1″	26′— 1″	24″	6
200,000	38′	17′— 5″	26′—11″	24″	6
250,000	40′	20′— 1″	30′— 1″	30″	6
300 000	40′	25′— 5″	35′— 5″	30″	6
400,000	47′	23′— 1″	34′—10″	30″	8
500,000	51′	24′— 5″	37′— 2″	30″	8
600,000	54′	26′— 1″	39′— 7″	36″	10
750,000	58′	28′— 5″	42′—11″	36″	10
1,000,000	66′	28′— 3″	44′— 9″	36″	12

Caldwell TANKS AND TOWERS

SMALL HEMISPHERICAL BOTTOM STEEL TANKS WITH ANGLE TOWERS

The laced channel tower is not economical in the smaller sizes so some time ago we designed a standard series of angle towers for hemispherical bottom tanks which compare favorably in price with either steel or wood flat bottom tanks on standard towers.

We have made the tanks of three-sixteenths inch steel which we consider ample for these small sizes but we can furnish them in one-quarter inch thickness at an extra price for those who prefer a heavier tank.

The towers are designed in accordance with the latest specifications of the American Institute of Steel Construction. They are much simpler and more in proportion to the actual loads coming upon them. This is the same basis and construction as used in our Standard Angle Towers, that we have been making for a number of years, several thousand of which are now in use.

We carry the material in stock for the sizes listed and most of the usual sizes already made up ready to ship out. We cannot vary from these sizes except on special order at an increased cost.

The field joints of the tower are made with double nutted bolts but the tank is riveted. We recommend hot riveting especially in the larger sizes but cold riveting can be used for the three-sixteenths tanks. The erection is comparatively simple and can be handled by a good mechanic familiar with riveting and caulking or we can erect it for you.

PRICE LIST OF HEMISPHERICAL BOTTOM STEEL TANKS

With Angle Towers

5,000 Gallons

Height in feet	Weight in pounds	Price Tank and Tower	Base Spread on Centers
15	5480	$ 675.80	9′— 0
25	6130	740.00	10′—10¼″
35	6860	805.05	12′— 8½″
45	7630	879.10	14′— 6¾″
55	8550	967.60	16′— 5″
65	9580	1066.70	18′— 3¼″
75	10740	1178.30	20′— 1½″
85	12100	1309.10	21′—11¾″
95	13770	1444.70	23′—10″
105	15530	1609.45	25′— 8¼″

$\frac{3}{16}$″ Tank and No. 12 Cover only.

10,000 Gallons

Height in feet	Weight in pounds	Price Tank and Tower	Base Spread on Centers
15	8880	$1016.00	10′— 7⅜″
25	9730	1090.90	12′— 5⅝″
35	10630	1175.15	14′— 3⅞″
45	11670	1272.45	16′— 2⅛″
55	12810	1364.25	18′— 0⅜″
65	14170	1488.00	19′—10⅝″
75	15630	1620.90	21′— 8⅞″
85	17410	1782.85	23′— 7⅛″
95	19340	1958.50	25′— 5⅜″
105	21390	2145.05	27′— 3⅝″

Extras for ¼″ Tank and ⅛″ Cover.
Extra price, $132.40. Extra wt., 2111 lbs.

15,000 Gallons

Height in feet	Weight in pounds	Price Tank and Tower	Base Spread on Centers
15	11150	$1151.40	12′— 2½″
25	12160	1240.70	14′— 0¾″
35	13310	1342.35	15′—11″
45	14590	1455.50	17′— 9¼″
55	15930	1573.95	19′— 7½″
65	17460	1709.20	21′— 5¾″
75	19310	1872.75	23′— 4″
85	21260	2045.10	25′— 2¼″
95	23410	2197.45	27′— 0½″
105	25750	2398.20	28′—10¾″
115	28190	2607.55	30′— 9″
125	30740	2826.30	32′— 7¼″

Extra for ¼″ Tank and ⅛″ Cover.
Extra price, $143.20. Extra wt., 2687 lbs.

20,000 Gallons

Height in feet	Weight in pounds	Price Tank and Tower	Base Spread on Centers
15	13680	$1372.70	13′—10¼″
25	14940	1480.75	15′— 8½″
35	16310	1598.30	17′— 6¾″
45	17750	1721.80	19′— 5″
55	19320	1856.50	21′— 3¼″
65	21290	2025.55	23′— 1½″
75	23360	2203.20	24′—11¾″
85	25640	2398.80	26′—10″
95	27990	2600.45	28′— 8¼″
105	30460	2812.35	30′— 6½″
115	33050	3034.60	32′— 4¾″
125	36190	3304.00	34′— 3″

Extra for ¼″ Tank and ⅛″ Cover.
Extra price, $163.60. Extra wt., 2883 lbs.

25,000 Gallons

Height in feet	Weight in pounds	Price Tank and Tower	Base Spread on Centers
15	15270	$1520.05	13′—10¼″
25	16630	1636.75	15′— 8½″
35	18090	1762.00	17′— 6¾″
45	19640	1876.20	19′— 5″
55	21390	2021.80	21′— 3¼″
65	23600	2205.70	23′— 1½″
75	25880	2395.40	24′—11¾″
85	28230	2590.90	26′—10″
95	30780	2803.05	28′— 8¼″
105	33450	3025.20	30′— 6½″
115	36210	3254.80	32′— 4¾″
125	39390	3519.40	34′— 3″

Extra for ¼″ Tank and ⅛″ Cover.
Extra price, $206.30. Extra wt., 3332 lbs.

30,000 Gallons

Height in feet	Weight in pounds	Price Tank and Tower	Base Spread on Centers
15	17710	$1733.10	13′—10¼″
25	19260	1862.10	15′— 8½″
35	21020	2008.50	17′— 6¾″
45	22840	2159.95	19′— 5″
55	24780	2321.35	21′— 3¼″
65	27180	2521.00	23′— 1½″
75	29650	2726.55	24′—11¾″
85	32200	2938.70	26′—10″
95	34890	3162.50	28′— 8½″
105	37740	3399.60	30′— 6½″
115	40700	3645.90	32′— 4¾″
125	44100	3928.75	34′— 3″

Extra for ¼″ Tank and ⅛″ Cover.
Extra price, $235.70. Extra wt., 4005 lbs.

Heights are nominal and measured from the top of the foundations to the low water level.

Prices include the tank with cover, balcony, hand rail and ladders from 10 feet above ground to balcony, a revolving ladder to the apex of the roof and an inside ladder, all with one shop coat of paint.

We supply plans and specifications for putting in the foundations.

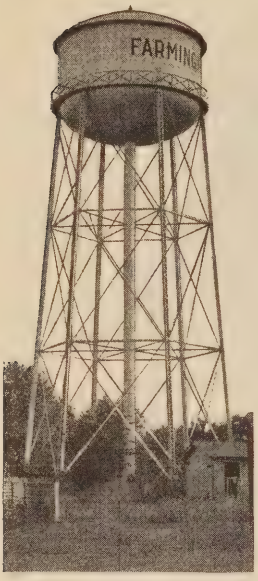
We erect anywhere or we will furnish plans for the customer to erect.

These prices are subject to a liberal discount that will be quoted on application, or we will quote net delivered prices and to include erection when desired.

State what Insurance Requirements, if any, and whether we shall include Riser Pipe and Frost Boxing.

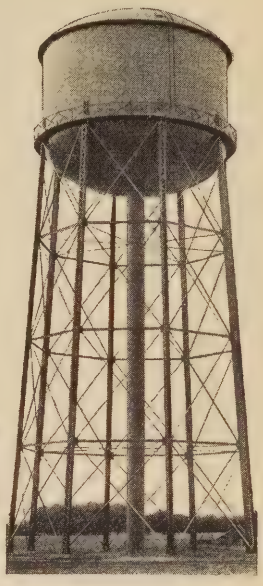
Caldwell TANKS AND TOWERS

TOWN WATER WORKS



FARMINGTON, MO.
200,000 gals., 100 ft. high

CROSS PLAINS, TEX.
60,000 gals., 60 ft. high



ST. MATHEWS, KY.
500,000 gals., 113 ft. high

DUE WEST, S. C.
50,000 gals., 69 ft. high

SO. BRAINTREE, MASS.
75,000 gals., 40 ft. to top

MASON, OHIO
100,000 gals., 100 ft. high

TOWN WATER WORKS

The elevated tank has proven its worth for water storage for Town Water Works. We have furnished a great many for this purpose. The early ones were wood tanks but now are almost exclusively all steel hemispherical or elliptical bottom tanks.

We List Below Some of the Towns That Have Installed Caldwell Tanks

ALABAMA
- Columbiana
- Gordo
- Marion
- Red Level
- Uniontown

ARIZONA
- Glendale

ARKANSAS
- Dermott
- England
- Fayetteville
- Forrest City
- Fort Smith
- Hamburg
- Lonoke
- Luxora
- Marvell
- Ozan
- Warren

CONNECTICUT
- Danbury
- Thompson

DELAWARE
- Frederica

FLORIDA
- Bartow
- Belleair
- Clearwater Harbor
- Jasper
- Lake Helen
- Naples
- Plant City

GEORGIA
- Baxley
- Eastman
- Ellaville
- Flowery Branch
- Pretoria

ILLINOIS
- Breese
- Cairo
- Germantown
- Highland
- Ladd
- La Harpe
- Lake Villa
- Lebanon
- Loraine
- Macon
- Mendon
- Millstadt
- Morrisonville
- New Baden
- Odell
- Oquawka
- Plymouth
- Sublette
- Waynesville
- Weldon

INDIANA
- Converse
- Cynthiana
- Dublin
- Hope
- Linton
- Lyons

INDIANA—Cont.
- Milltown
- Napanee
- New Harmony
- Richmond
- Royal Center
- Sellersburg
- Spiceland
- Terre Haute
- Yorktown

IOWA
- Clearance
- Doon
- Granville
- Kingsley
- Mountain Home
- Orange City
- Remsen
- Rock Valley
- Sheldon
- Vail
- Waverly

KANSAS
- Enterprise
- Girard
- Liberal
- Millford

KENTUCKY
- Adairville
- Anchorage
- Arlington
- Auburn
- Barlow
- Cloverport
- Danville
- Eminence
- Hardinsburg
- Harrodsburg
- Hazel
- Irvington
- Junction City
- La Center
- Louisville
- Middlesborough
- New Haven
- Nortonville
- Princeton
- Rockport
- Shepherdsville
- Smith's Grove
- Uniontown
- Warsaw

LOUISIANA
- Bastrop
- Lutchee
- Oak Ridge
- Mer Rouge
- Plaquemine

MAINE
- Camden
- Rockland
- York Beach
- York Village

MARYLAND
- Blue Ridge Summit
- Chevy Chase
- Havre de Grace
- Mountain Lake
- Mt. Washington
- Princess Anne

MASSACHUSETTS
- So. Braintree

MICHIGAN
- Harbor Beach
- Hematite
- Mt. Washington
- Ovid
- Roscommon
- Sand Beach
- Shepherd

MINNESOTA
- Adrian
- Bovey
- Hibbing
- Northome
- Virginia

MISSISSIPPI
- Baldwyn
- Bolton
- Dexter
- Gunnison
- Indianola
- Meridian
- Mount Olive
- Scranton
- Shuqualak

MISSOURI
- Concordia
- Excelsior Springs
- Farmington
- Louisiana
- Ozark
- Steelville

MONTANA
- Gardiner

NEW JERSEY
- Allenhurst
- Asbury Park
- Cape May Court House
- Carson's Inlet
- Laurence Harbor
- Lindenwold
- North Spring Lake
- Pitman
- Pitman Grove
- Seaside Park
- Westwood

NEW HAMPSHIRE
- Berlin

NEW YORK
- Barren Island
- Forrest Lawn
- Haines Falls
- Pine Plains

NEBRASKA
- Elmwood
- Rushville

NEVADA
- Reno

NORTH CAROLINA
- Aberdeen
- Concord
- Kenansville
- Salisbury

OHIO
- Cardington
- Continental
- Jackson Center
- Kings Mills
- Marice City
- Mason
- Oakwood
- Proctorville

OKLAHOMA
- El Reno
- Oregon

PENNSYLVANIA
- Beaver Falls
- Delta
- Ephrata
- Hillsboro
- Linwood
- Osborn
- Rochester
- Vandergrift
- Wyalusing

RHODE ISLAND
- Shawomet Beach

SOUTH CAROLINA
- Bishopville
- Due West
- Pelzer
- Salley

SOUTH DAKOTA
- Menno

TENNESSEE
- Bells
- Brownsville
- Collierville
- McKenzie
- Manchester
- Somerville

TEXAS
- Amarillo
- Beeville
- Cooper
- Corsicana
- Cross Plains
- Llano
- Olden
- Reedville
- Shiner
- Vega
- Whitney

VIRGINIA
- Cape Charles
- Charlotte Court House
- Coeburn
- Farmville
- Harrisonburg
- Onancock
- Waynesboro

WEST VIRGINIA
- Charleston
- Clendenin
- Glendale
- Glenville
- Lewisburg
- Ronceverte

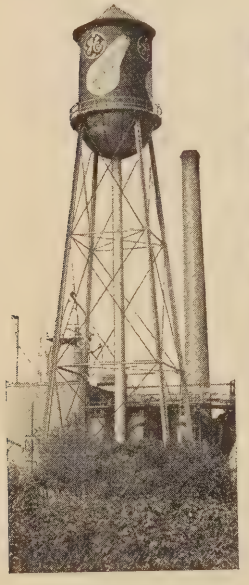
WISCONSIN
- Hillsboro
- Knight
- Monroe

ALL STEEL TANKS AND TOWERS

Lever Bros.
Hammond, Ind.
90,000 and 30,000 gals.,
150 ft. high

Dudlo Mfg. Co.
Ft. Wayne, Ind.
50,000 gals., 31 ft. and
41 ft. above building

Brown-Forman Dist. Co.
Louisville, Ky.
100,000 gals., 54 ft.
above building



General Electric Co.
Cleveland, Ohio
100,000 gals., 111 ft.
high

Town of
Harrodsburg, Ky.
150,000 gals., 85 ft.
high

U. S. Veterans' Hospital
Lexington, Ky.
100,000 gals., 112 ft.
high

STANDARD STEEL TOWERS

FOR WOOD OR STEEL TANKS

We illustrate on the following pages three distinct types of steel towers, Angle Column, Tubular Column and Latticed Column.

The Angle Column Tower is the simplest and least expensive, the Tubular Column Tower is our original patented tower and is considered by many as the best appearing and the Latticed Column Tower is of bridge construction. The same as our largest towers. All are designed for the full dead load and a hundred mile wind with full factor of safety.

Each class tower is designed only for tanks of specific sizes which are given in the table below.

In asking for prices, state the kind of tank (wood or steel), capacity in gallons, the kind of Tower and the height and what Insurance Requirements are to be complied with, if any; also whether we shall include the Riser Piping and Frost Boxing for Riser Pipes and Erection in our estimate.

CORRECT TANK SIZES FOR TOWERS

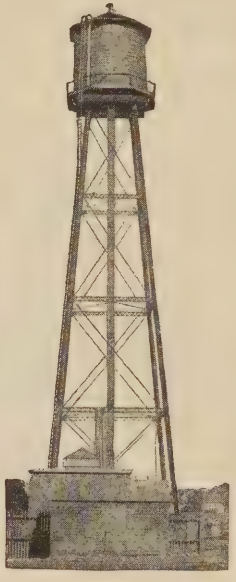
Standard Towers	Tank to Use					
Either of the Tanks Listed Will Fit on Either Class Tower Opposite	Capacity	Wood See Pages 2 to 9 Diam.	Deep	No.	Galv. Steel See Page 26 Plain Steel See Page 22 Diam.	High
For Class "AA" Angle Column...	500	5.0	4.0	16	5.0	4.0
For Class "O" Tubular Column. } or Class "CC" Angle Column....}	1000	6.6	4.5	30	6.0	5.0
	1500	6.6	6.5	32	6.6	6.6
For Class "A" Tubular Column } or Class "FF" Angle Column...}	2800	8.0	7.5	54	8.0	8.0
	3000	8.0	8.5	55		
For Class "B" Tubular Column } or Class "HH" Angle Column.....}	5000	10.0	9.5	79		
	*5000	10.0	9.4	F.M.		
	6000	10.0	11.5	80	10.0	10.0
For Class "C" Tubular Column } or Class "JJ" Angle Column.....}	10000	12.6	11.5	98	12.0	12.0
	*10000	12.6	13.4	F.M.		
	12000	12.6	13.5	99		
For Class "D" Tubular Column } or Class "KK" Angle Column.. or Class "LD" Latticed Column }	15000	14.0	13.5	107	14.0	14.0
	*15000	14.0	15.4	F.M.		
	17000	14.0	15.5	108		
For Class "E" Tubular Column } or Class "LL" Angle Column.. or Class "LE" Latticed Column }	20000	16.0	13.5	117	16.0	14.0
	*20000	16.0	15.4	F.M.		
	22000	16.0	15.5	118		
For Class "ES" Tubular Column } or Class "NN" Angle Column... or Class "LES" Latticed Column }	25000	16.0	17.4	119	16.0	18.0
	*25000	16.0	17.4	F.M.	16.0	18.0
For Class "F" Tubular Column.. } or Class "PP" Angle Column... or Class "LF" Latticed Column. }	30000	18.0	15.4	129	18.0	16.0
	*30000	18.0	17.4	F.M.		
	33000	18.0	17.4	130		
For Class "FS" Tubular Column } or Class "QQ" Angle Column.. or Class "LFS" Latticed Column }	35000	18.0	19.4	131	18.0	20.0
	*35000	18.0	19.4	F.M.		
For Class "G" Tubular Column. } or Class "RR" Angle Column. or Class "LG" Latticed Column. }	36000	19.6	17.4	133		
	40000	19.6	19.4	134	20.0	18.0
	*40000	19.6	19.4	F.M.		
For Class "SS" Angle Column.. } or Class "LH" Latticed Column }	50000	22.0	17.4	145	22.0	18.0
	*50000	22.0	19.4	F.M.		
	55000	22.0	19.4	146	22.0	20.0

In larger sizes. Hemispherical Bottom Steel Tanks are used nearly altogether on account of being more economical. See pages 29 to 33.

*Tank sizes marked with a star and followed by F.M. are the sizes to suit Insurance Requirements. See page 10.

WOOD TANK AND STEEL TOWER OUTFITS

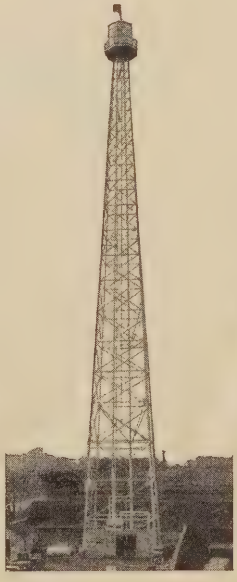
Peninsular Paper Co.
Ypsilanti, Mich.
15,000 and 10,000 gals.,
20 and 32 ft. high



Passaic
Worsted Spinning Co.
Dundee Station, N. J.
50,000 gals., 125 ft. Latticed Column Tower

Borough of Union
Beach, N. J.
30,000 gals., 51 ft. high
Tubular Tower

Vonnegut Hardware Co.
Indianapolis, Ind.
15,000 gals., 20 ft. high
Tower on a Building



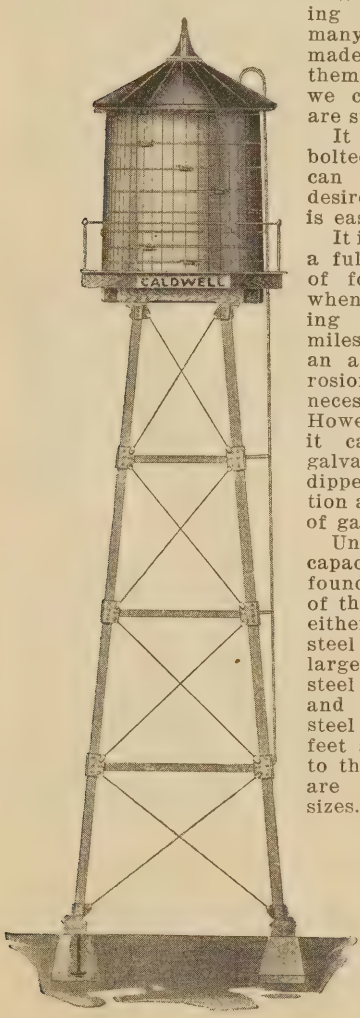
Norman E. Dell
Buffalo, N. Y.
5,000 gals., 200 ft.
Angle Column Tower

B. L. Lyford & Co.
Helena, Ark.
10,000 gals., 52 ft.
Angle Column Tower

ANGLE COLUMN TOWER

This is our simplest and most economical tower. It is made in capacities of from 500 to 50,000 gallons and in heights which are multiples of 10 feet for all except the largest which are in multiples of 15 feet.

It is not to be confused with the flimsy angle towers of the windmill type for it is designed with the same safety factors and wind velocities that we use in our heaviest towers for tanks up to a million gallons.

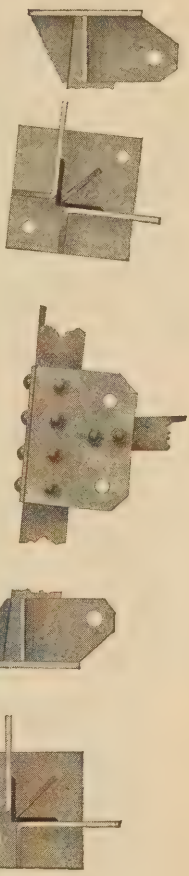


We have been making this tower for many years and have made thousands of them and as far as we can determine all are still standing.

It is furnished with bolted connections but can be riveted if so desired. Either way it is easy to erect.

It is designed to have a full factor of safety of four to one even when the wind is blowing at one hundred miles per hour. It has an allowance for corrosion so that it is only necessary to paint it. However, at extra cost, it can be furnished galvanized; that is hot dipped after fabrication and not just made of galvanized material.

Under 20,000 gallons capacity, the tank foundation at the top of the tower can be of either wood timbers or steel beams and in the larger sizes it is of steel only. A walkway and handrailing with steel ladders from 10 feet above the ground to the top of the tank are furnished on all sizes.



These Towers are acceptable to any and all Insurance Companies. In asking for prices state what Insurance Requirements, if any, the outfit must comply with; the kind of Tank (wood or steel), Capacity in gallons; Height of Tower and if we are to include Riser Piping and Frost Boxing for Riser Pipes and Erection in our estimate.

Caldwell TANKS AND TOWERS

PRICE LIST OF ANGLE TOWERS

See correct Tank sizes on page 37.

See prices of Wood Tanks on pages 5 to 10, Steel Tanks on page 22 and Galvanized Tanks on page 26.

CLASS AA

For 500 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	1050	$106.40	$163.50	4′—10″
22	1422	146.92	243.10	6′— 8″
32	1817	191.10	322.10	8′— 6″
42	2236	229.60	402.60	10′— 5″
52	2716	280.76	501.76	12′— 3″
62	3308	343.85	624.05	14′— 1″

Prices include Longleaf Yellow Pine Girders, Joists and Walkway with Iron Handrail and Ladder.

CLASS CC

For 1,000 and 1,500 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	1362	$135.50	$192.50	5′— 4″
22	1739	167.62	262.35	7′— 2″
32	2140	212.42	347.22	9′— 0″
42	2622	257.50	440.50	10′—11″
52	3187	317.74	557.24	12′— 9″
62	3857	389.16	698.66	14′— 7″

Prices include Longleaf Yellow Pine Girders, Joists and Walkway with Iron Handrail and Ladder. Extra for Steel Girders and Joists $17.00

CLASS FF

For 3,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	1814	$157.20	$229.10	6′— 6″
22	2294	207.10	327.10	8′— 5″
32	2804	260.10	431.00	10′— 3″
42	3374	319.40	547.30	12′— 1″
52	4085	393.36	692.36	13′—11″
62	4870	465.52	843.02	15′—10″
72	5822	550.20	1022.90	17′— 8″
82	6822	651.60	1224.30	19′— 6″

Prices include Longleaf Yellow Pine Girders, Joists and Walkway with Iron Handrail and Ladder. Extra for Steel Girders and Joists $25.00

CLASS HH

For 5,000 and 6 000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	2498	$208.68	$300.68	7′— 5″
22	3133	273.04	428.54	9′— 3″
32	3801	335.44	553.30	11′— 1″
42	4539	408.32	698.50	13′— 0″
52	5367	489.84	860.85	14′—10″
62	6305	582.86	1046.10	16′— 8″
72	7369	687.96	1228.10	18′— 6″
82	8530	802.74	1463.20	20′— 5″

Prices include Longleaf Yellow Pine Girders, Joists and Walkway with Iron Handrail and Ladder. Extra for Steel Girders and Joists $25.00

CLASS JJ

For 10,000 and 12,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	3615	$293.55	$403.05	8′—11″
22	4406	367.25	555.85	10′— 9″
32	5266	452.40	721.50	12′— 7″
42	6174	537.35	895.45	14′— 6″
52	7293	633.15	1100.90	16′— 4″
62	8549	750.70	1323.60	18′— 2″
72	9956	882.20	1588.65	20′— 0″
82	11436	1020.90	1848.65	21′—11″
92	13251	1190.80	2210.25	23′— 9″
102	15187	1372.00	2575.40	25′— 7″

Prices include Longleaf Yellow Pine Girders, Joists and Walkway with Iron Handrail and Ladder. Extra for Steel Girders and Joists $45.00

CLASS KK

For 15,000 and 17,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	4829	$380.15	$520.75	9′—10″
22	5855	470.40	713.50	11′— 9″
32	6922	567.60	910.60	13′— 7″
42	8085	673.40	1123.30	15′— 5″
52	9317	785.55	1357.30	17′— 3″
62	10729	914.00	1587.00	19′— 2″
72	12254	1052.80	1870.65	21′— 0″
82	14225	1234.15	2260.35	22′—10″
92	16279	1419.10	2640.45	24′— 8″
102	18496	1582.20	3014.15	26′— 7″

Prices include Longleaf Yellow Pine Girders, Joists and Walkway with Iron Handrail and Ladder. Extra for Steel Girders and Joists $70.00

Heights are standard and are from ground or grade line to bottom of tank.

On all Towers a ladder is supplied from 3 feet above the top of the tank to 11 feet above the ground.

These Towers can be furnished with either bolted or riveted connections, as preferred, but are regularly furnished with bolted sections though we recommend them to be riveted.

Prices do not include tank.

We supply plans and specifications for putting in the foundations and plans for the erection where customer does the erecting.

We will quote for erecting any size outfit in any part of the country when desired.

These prices are subject to a liberal discount that will be quoted on application, or we shall be glad to quote net delivered prices, and to include erection when desired.

Caldwell TANKS AND TOWERS

PRICE LIST OF ANGLE TOWERS—Continued

See correct Tank sizes on page 37.

See prices of Wood Tanks on pages 5 to 10, Steel Tanks on page 22 and Galvanized Tanks on page 26.

CLASS LL

For 20,000 and 22,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	5979	$553.90	$1028.45	10′—11″
22	7170	655.62	1243.30	12′—10″
32	8422	766.26	1454.30	14′— 8″
42	9722	881.25	1689.55	16′— 6″
52	11158	1008.10	1949.20	18′— 4″
62	12698	1144.25	2227.80	20′— 3″
72	14440	1298.25	2542.95	22′— 1″
82	16568	1486.35	2927.90	23′—11″
92	18800	1683.65	3331.65	25′— 9″
102	21145	1891.00	3755.90	27′— 8″

CLASS NN

For 25,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	6510	$613.70	$1138.65	10′—11″
22	7878	735.92	1390.85	12′—10″
32	9316	863.10	1654.65	14′— 8″
42	10826	996.56	1906.95	16′— 6″
52	12587	1132.32	2205.60	18′— 4″
62	14452	1292.32	2538.10	20′— 3″
72	16360	1456.04	2839.90	22′— 1″
82	18610	1649.06	3235.40	23′—11″
92	21030	1856.72	3660.85	25′— 9″
102	23537	2071.84	4101.60	27′— 8″

CLASS PP

For 30,000 to 33,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	7709	$704.45	$1290.15	11′—11″
22	9209	828.10	1548.85	13′—10″
32	10778	963.25	1825.20	15′— 8″
42	12512	1112.00	2130.00	17′— 6″
52	14359	1270.50	2454.30	19′— 4″
62	16354	1441.65	2805.45	21′— 3″
72	18750	1641.50	3220.90	23′— 1″
82	21234	1860.30	3663.35	24′—11″
92	23832	2082.30	4119.10	26′— 9″
102	26601	2320.80	4606.80	28′— 8″

CLASS QQ

For 35,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
12	8801	$801.90	$1456.40	11′—11″
22	10485	946.30	1743.90	13′—10″
32	12238	1082.60	2029.10	15′— 8″
42	14147	1241.40	2350.30	17′— 6″
52	16173	1410.00	2691.10	19′— 4″
62	18335	1589.90	2954.80	21′— 3″
72	20946	1807.10	3493.90	23′— 1″
82	23610	2028.70	3941.90	24′—11″
92	26362	2255.70	4402.90	26′— 9″
102	29351	2506.40	4907.60	28′— 8″

CLASS RR

For 36,000 to 45 000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
20	11514	$1030.20	$1883.60	14′— 0″
35	14366	1267.50	2356.20	16′— 9″
50	17384	1494.30	2832.00	19′— 7″
65	20705	1762.00	3373.60	23′— 4″
75	23196	1962.80	3779.90	24′— 2″
80	24432	2062.40	3981.50	25′— 1″
95	28454	2386.60	4637.50	27′—11″
100	29576	2421.00	4764.50	28′—10″
110	32843	2675.90	5288.90	30′— 8″
125	37255	3020.00	5997.00	33′— 5″

CLASS SS

For 50,000 to 55,000 Gallon Tanks.
See Sizes on Page 37.

Height in Feet	Ship'g Wt. Lbs.	Price Painted	Price Galv'd	Base Spread on Centers
20	16650	$1442.40	$2656.50	15′— 6″
35	19940	1716.10	3194.10	18′— 3″
50	23583	1990.60	3759.40	21′— 0″
65	27582	2274.00	4362.70	23′—10″
75	30654	2513.60	4848.10	25′— 9″
80	31965	2615.80	4953.00	26′— 8″
95	36393	2961.20	5754.70	29′— 5″
100	37927	3080.90	4997.20	30′— 4″
110	41590	3366.60	6576.00	32′— 2″
125	46934	3783.46	7420.30	35′— 0″

Prices include Steel Girders, Joists, Handrail and Ladder with Longleaf Yellow Pine Walkway

Heights are standard and are from ground or grade line to bottom of tank.

On all Towers a ladder is supplied from 3 feet above the top of the tank to 11 feet above the ground.

These Towers can be furnished with either bolted or riveted connections as preferred, but are regularly furnished with bolted sections though we recommend them to be riveted.

Prices do not include tank.

We supply plans and specifications for putting in the foundations and plans for erecting where customer does the erecting.

We will quote for erecting any size outfit in any part of the country when desired.

These prices are subject to a liberal discount that will be quoted on application, or we shall be glad to quote net delivered prices, and to include erection when desired.

Caldwell TANKS AND TOWERS

TUBULAR COLUMN STEEL TOWER

This is our original steel tower and was designed thirty years ago. It still meets all modern requirements in design and is preferred by many on account of appearance and other advantages.

It is built with four columns and is constructed for Tanks from 1,000 to 40,000 gallons.

The columns of these Towers are cut off square at the ends and then faced in a lathe to insure a true bearing against the internal flange in the heavy socket castings that make the joint connections, this flange also being faced off. These sockets are made on the proper angle to suit the batter of the Tower, and have a boss that is tapped to receive the extra long threaded ends of the round steel rods that are used for sway bracing. These rods are provided with drop forged turnbuckles to secure proper tension.

The Tower is the simplest in design of any on the market, and the easiest to erect as the use of socket connections does away with all riveting and makes it unnecessary to use skilled labor in putting it up. Any ordinary mechanic can erect the structure with common labor.

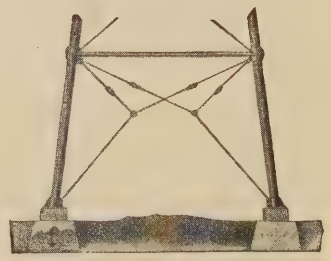
Practically no scaffolding is required as the sections are short and each is just like the others, and one section can be used from which to erect the next. A ginpole with ropes and blocks and wrenches are all the tools required.

In asking for prices state the kind of Tank (wood or steel), capacity in gallons, height of tower, and if we are to include the Riser Piping and Frost Boxing for Riser Pipe and Erection in our Estimate.

See prices on next page

STANDARD DRIVEWAY

A driveway through any of our standard towers can be arranged by the special bracing illustrated at a small additional cost. In our Latticed Column Tower there is usually sufficient clearance for a driveway without any change. This design is very simple but structurally correct.



Tell us whether the driveway goes straight through or turns under the tower and also the clearance required; that is, the height above the grade line and the width at this height.

PRICE LIST OF TUBULAR COLUMN STEEL TOWERS

See correct Tank sizes on page 37.
See prices of Wood Tanks on pages 5 to 10, Steel Tanks on page 22 and Galvanized Tanks on page 26.

CLASS O

For 1,000 to 1,500 Gallon Tanks.
See Sizes Page 37.

Height in Feet	Weight in Pounds	Prices Complete	Base Spread on Centers
15	1535	$121.44	6′— 6″
20	1988	169.53	7′—11″
27	2129	185.13	9′— 6″
39	2750	252.75	12′— 6″
51	3532	339.00	15′— 6″
63	4345	424.86	18′— 6″
75	5217	516.87	21′— 6″

Extra for Steel Girders and Joists.. ...$17.00
Estimated Cost of Foundations in good ground.....$30.00

CLASS A

For 2,000 to 3,000 Gallon Tanks.
See Sizes Page 37.

Height in Feet	Weight in Pounds	Prices Complete	Base Spread on Centers
15	2022	$153.18	7′— 6″
20	2638	217.47	8′— 9″
27	2776	232.71	10′— 6″
39	3581	316.59	13′— 6″
51	4515	416.07	16′— 6″
63	5450	514.80	19′— 6″
75	6458	619.56	22′— 6″
87	7783	751.32	25′— 6″

Extra for Steel Girders and Joists.....$25.00
Estimated Cost of Foundations in good ground.....$40.00

CLASS B

For 5,000 to 6,000 Gallon Tanks.
See Sizes Page 37.

Height in Feet	Weight in Pounds	Prices Complete	Base Spread on Centers
15	2826	$205.14	8′— 6″
20	3204	253.50	9′— 9″
27	3879	312.42	11′— 6″
39	5011	426.78	14′— 6″
51	6290	559.62	17′— 6″
63	7614	693.24	20′— 6″
75	9016	835.41	23′— 6″
87	10531	986.58	26′— 6″
100	11947	1125.33	29′— 6″

Extra for Steel Girders and Joists.....$25.00
Estimated Cost of Foundations in good ground.....$50.00

CLASS C

For 10,000 to 12,000 Gallon Tanks.
See Sizes Page 37.

Height in Feet	Weight in Pounds	Prices Complete	Base Spread on Centers
15	4287	$306.60	10′— 0″
20	4795	364.26	11′— 3″
27	5777	452.64	13′— 0″
39	7373	607.74	16′— 0″
51	9148	784.14	19′— 0″
63	10988	963.12	22′— 0″
75	12967	1154.40	25′— 0″
87	15059	1356.30	28′— 0″
100	17288	1569.69	31′— 0″

Extra for Steel Girders and Joists.....$45.00
Estimated Cost of Foundations in good ground.....$65.00

CLASS D

For 15,000 to 17,000 Gallon Tanks.
See Sizes Page 37.

Height in Feet	Weight in Pounds	Prices Complete	Base Spread on Centers
15	5601	$395.70	11′— 0″
20	6264	462.21	12′— 3″
27	7367	567.93	14′— 0″
39	9229	747.93	17′— 0″
51	11210	939.66	20′— 0″
63	13312	1142.43	23′— 0″
75	15535	1355.43	26′— 0″
87	17877	1579.77	29′— 0″
100	20344	1815.75	32′— 0″

Extra for Steel Girders and Joists...$70.00
Estimated Cost of Foundations in good ground $80.00

CLASS E

For 20,000 to 22,000 Gallon Tanks.
See Sizes Page 37.

Height in Feet	Weight in Pounds	Prices Complete	Base Spread on Centers
15	7062	$593.21	12′— 0″
20	7682	667.37	13′— 2″
27	9261	836.24	15′— 0″
39	11595	1091.24	18′— 0″
51	14078	1360.31	21′— 0″
63	16808	1645.19	24′— 0″
75	19490	1940.66	27′— 0″
87	22423	2252.39	30′— 0″
100	25505	2578.34	33′— 0″

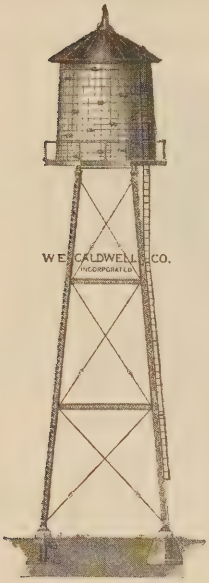
Estimated Cost of Foundations in good ground $100.00

PRICES OF LARGER SIZES ON APPLICATION

Prices include Longleaf Yellow Pine or Oregon Fir Girders, Joists and Walkway with Iron Handrail and Ladder, except Classes E to G, which include Steel Girders and Joists. Note extra price for Steel Girders and Joists.

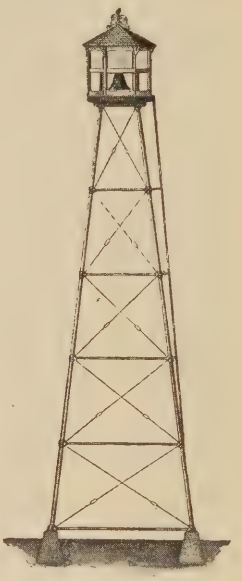
Heights are standard and are from ground or grade line to bottom of tank.
On all towers a ladder is supplied from 3 feet above the top of the tank to 13 feet above the ground.
Prices do not include tank.
We supply plans and specifications for putting in the foundations and plans for the erection where customer does the erecting.
We will quote for erecting any size outfit in any part of the country when desired.
These prices are subject to a liberal discount that will be quoted on application, or we shall be glad to quote net delivered prices, and to include erection when desired.

OTHER TOWERS, ETC.



Latticed Column Tower

Observation or Shooting Tower



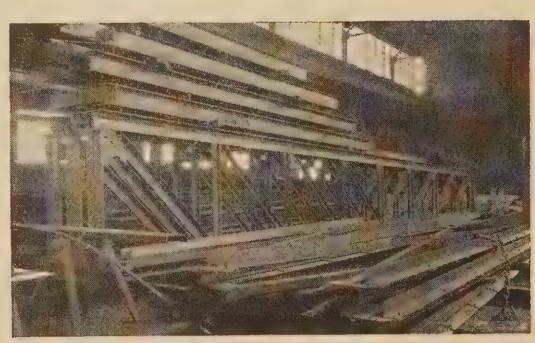
Bell or Siren Tower

CONVEYOR SUPPORTS AND BINS

W. Va. Brick Co.
Charleston, W. Va.

STRUCTURAL STEEL FOR BUILDINGS

James Russel Lowell School

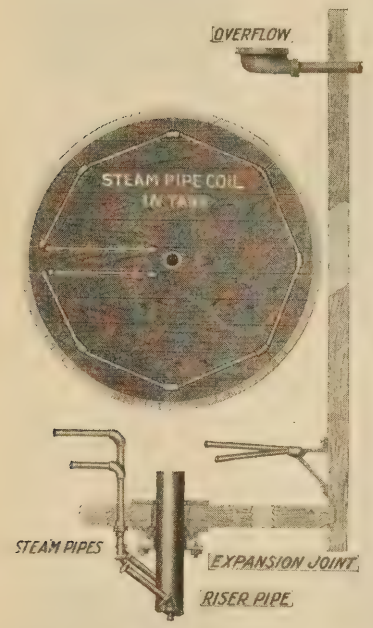


RISER PIPES

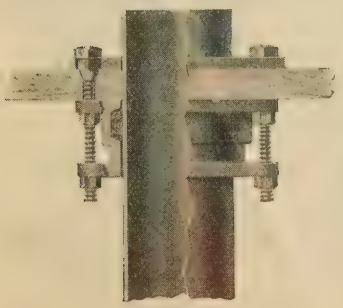
PRICES ON PAGE 47

CAST IRON FLANGED RISER PIPE

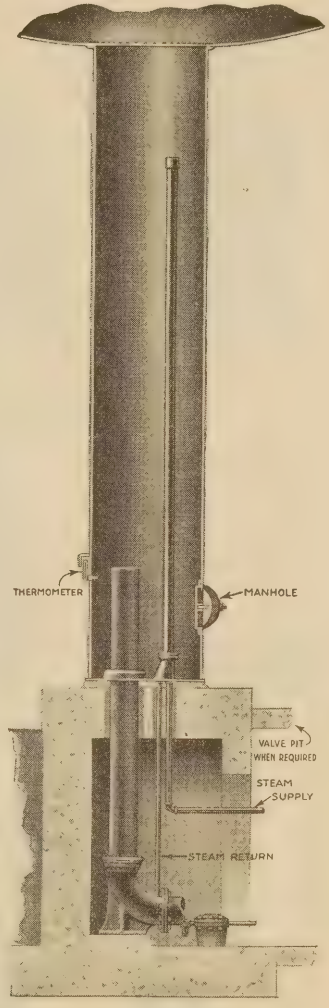
With Steam Coil in Tank



COMBINED EXPANSION JOINT AND PIPE CONNECTION



LARGE PLATE STEEL RISER



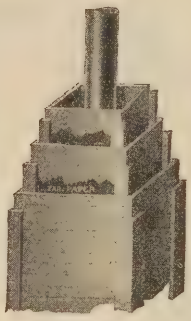
NOTE: One pipe is generally used for inlet and outlet.

ACCESSORIES

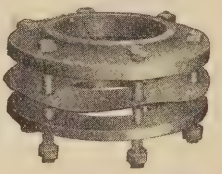
PRICES ON PAGE 47

CIRCULAR FROST BOXING

SQUARE FROST BOXING



PIPE FLANGE



Furnished with Bolts, Nuts, Washers and Rubber Gaskets

TANK OUTLET VALVE

See Opposite Page for Prices Which Include a Companion Flange to Match

PIPE COVERING

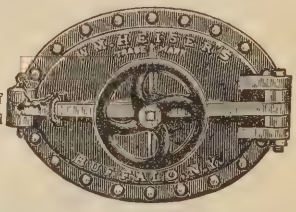
One-Inch Thick Layer of Hair Felt, Wired Around Wood Strips

AUTOMATIC ELECTRIC FLOAT SWITCH

For Starting and Stopping Pumps

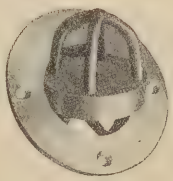
Prices on Application

MANHOLE DOORS

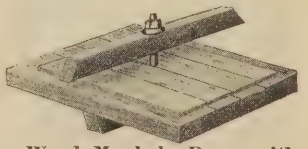


Cast Iron Manhole Door. Prices on Application

BRASS TAPERED OUTLET AND PLUG FOR DYE TUBS



Prices on Application



Wood Manhole Door, with either Iron or Brass Bolts. Prices on Application

Caldwell TANKS AND TOWERS

PRICES OF PIPING AND ACCESSORIES

As Illustrated on Two Previous Pages

PRICES OF RISER PIPES

Steel and Cast Iron Flanged

Height	2" Steel		2½" Steel		3" Steel		4" Steel		6" Steel		6" Cast Iron		8" Steel		8" Cast Iron	
	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price
12′	92	16.32	136	21.90	167	23.73	235	35.58	483	60.84	704	80.57	822	120.83	1027	121.46
15′	104	17.85	157	24.32	200	27.89	280	41.42	570	75.21	778	92.34	954	140.13	1180	137.33
20′	125	20.43	191	28.38	255	34.82	356	51.15	713	96.44	962	112.01	1173	170.66	1434	164.25
22′	133	21.32	203	29.81	271	37.13	380	53.82	755	101.09	1024	118.49	1234	179.04	1520	173.10
25′	145	22.65	221	31.94	295	40.59	416	59.16	818	108.06	1117	128.06	1327	191.61	1709	186.36
27′	152	23.57	235	33.39	312	42.93	438	60.47	858	112.71	1180	134.61	1389	199.95	1734	195.21
30′	164	25.01	253	35.67	339	45.90	477	65.21	930	121.13	1282	145.16	1447	214.91	1872	209.66
32′	172	25.95	265	37.19	357	47.88	503	68.38	978	126.74	1350	152.19	1569	224.87	1964	219.30
35′	184	27.39	283	39.47	384	50.85	542	73.14	1050	135.15	1452	162.74	1677	239.82	2122	233.75
39′	202	29.27	313	42.41	425	54.78	598	79.53	1146	146.30	1583	176.90	1824	259.79	2287	253.05
40′	210	30.39	323	43.85	438	56.46	616	81.90	1173	149.78	1623	181.38	1864	265.55	2339	259.17
42′	226	32.64	343	46.71	464	59.84	652	86.61	1227	156.74	1703	190.35	1944	277.07	2443	271.41
45′	250	36.00	373	50.99	503	64.88	706	93.69	1308	167.19	1823	203.82	2064	294.33	2599	289.79
50′	290	41.61	423	58.20	568	73.29	796	105.50	1443	184.59	2023	226.26	2264	323.13	2859	320.39
51′	299	42.77	439	59.57	577	74.99	816	107.85	1474	188.07	2060	230.72	2301	328.86	2936	326.58
55′	315	43.29	463	60.62	613	77.55	868	110.69	1570	193.10	2196	244.83	2445	337.97	3120	345.86
60′	335	43.95	493	61.97	658	80.78	933	114.24	1690	199.37	2366	262.49	2625	349.35	3350	369.95
62′	343	44.22	505	62.48	676	82.07	959	115.65	1738	201.87	2434	269.55	2697	353.90	3442	379.58
63′	348	44.42	517	62.84	690	82.34	974	116.36	1760	203.16	2464	273.02	2735	356.25	3490	384.42
65′	358	45.44	531	64.38	710	83.22	1002	119.43	1810	208.44	2532	280.22	2809	365.55	3584	393.66
70′	383	48.00	566	68.27	760	88.76	1072	127.11	1935	221.64	2702	298.20	2994	388.82	3819	416.76
75′	409	50.66	605	72.18	812	94.35	1141	134.72	2057	234.90	2875	316.19	3177	412.05	4051	439.77
80′	459	56.69	665	79.52	927	103.10	1241	146.34	2202	251.49	3083	339.45	3382	439.28	4331	472.52
85′	509	62.70	725	86.87	1042	111.84	1341	158.00	2347	268.07	3295	362.72	3587	466.50	4611	505.28
87′	526	65.07	753	89.87	1084	115.31	1380	162.63	2408	274.67	3375	371.96	3673	477.39	4718	518.45
90′	535	66.27	771	91.74	1153	118.04	1416	166.44	2480	282.20	3468	381.71	3775	490.05	4847	531.81
100′	574	70.29	831	98.15	1383	127.19	1538	179.10	2716	307.37	3774	414.23	4100	532.26	5271	576.32

PRICES OF BOXING

Height	1½"-2"-2½"				3" and 4"				6"				8"			
	Double Square		Triple Square		Double Square		Triple Square		Double Circular		Triple Circular		Double Circular		Triple Circular	
	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price	Wt.	List Price
12′	482	18.30	758	29.07	647	25.62	1039	39.18	596	22.11	1032	37.50	726	23.43	1161	42.84
15′	567	21.60	910	34.38	748	28.65	1228	46.74	781	29.13	1363	47.22	896	33.24	1436	52.08
20′	714	27.18	1150	44.76	943	35.94	1543	59.37	924	34.47	1608	58.74	1094	40.71	1745	64.08
22′	774	29.40	1248	47.88	1017	38.52	1667	63.75	1006	37.56	1752	64.05	1186	45.03	1891	69.39
25′	864	32.58	1395	52.56	1128	42.39	1853	77.82	1129	42.20	1968	71.87	1324	51.51	2110	77.36
27′	919	34.95	1494	55.68	1203	44.97	1980	85.20	1210	45.33	2114	77.31	1414	55.83	2259	82.71
30′	1009	38.28	1638	61.04	1317	49.47	2169	89.61	1315	49.29	2303	84.42	1543	59.61	2463	90.23
32′	1069	40.50	1734	64.61	1393	52.47	2295	92.55	1385	51.93	2429	89.16	1629	62.13	2599	95.24
35′	1159	43.83	1878	69.96	1507	56.97	2484	96.96	1490	55.89	2618	96.27	1758	65.91	2803	102.75
39′	1271	48.24	2068	77.01	1658	63.00	2733	102.90	1632	61.08	2866	105.75	1933	70.95	3080	112.68
40′	1300	49.32	2116	78.78	1696	64.43	2796	105.24	1667	62.39	2937	107.93	1976	72.53	3149	115.19
42′	1358	51.48	2212	82.32	1772	67.28	2922	109.92	1737	65.00	3079	112.28	2062	75.68	3287	120.20
45′	1445	54.72	2356	87.63	1886	71.55	3111	118.04	1842	68.91	3292	118.80	2191	80.40	3494	127.71
50′	1590	60.12	2596	96.48	2076	78.68	3426	128.64	2017	75.44	3647	129.68	2406	88.28	3839	140.24
51′	1620	61.20	2643	98.25	2113	80.13	3486	131.01	2053	76.71	3718	131.82	2452	89.85	3906	142.68
55′	1740	65.76	2835	105.33	2265	85.89	3738	140.37	2193	82.11	3934	141.36	2624	96.00	4177	152.70
60′	1890	71.46	3075	114.18	2455	93.00	3933	152.07	2368	88.86	4204	153.29	2839	103.89	4517	165.23
62′	1950	73.74	3171	117.72	2531	95.97	4179	156.75	2438	91.56	4312	158.06	2925	107.01	4653	170.24
63′	1975	74.88	3218	119.55	2568	97.35	4236	159.12	2476	92.85	4370	160.44	2971	108.51	4725	172.68
65′	2033	77.10	3314	123.06	2644	100.20	4362	163.83	2546	94.77	4496	164.76	3057	111.66	4863	177.69
70′	2178	82.65	3554	131.84	2834	107.33	4677	175.61	2721	99.57	4811	175.56	3272	119.46	5208	190.22
75′	2327	88.26	3793	140.67	3023	114.54	4991	187.29	2898	104.43	5121	186.39	3489	127.44	5548	202.65
80′	....	....	....	....	3213	121.07	5306	198.99	3073	112.31	5436	197.87	3704	135.47	5888	215.25
85′	....	....	....	....	3403	127.59	5621	210.69	3248	120.18	5751	209.34	3919	143.49	6228	227.85
87′	....	....	....	....	3478	131.76	5743	215.40	3319	123.39	5873	213.96	4009	146.67	6368	232.83
90′	....	....	....	....	3583	135.45	5917	221.93	3415	126.99	6047	220.13	4129	151.04	6575	239.67
100′	....	....	....	....	3933	147.81	6496	243.60	3741	139.08	6625	240.72	4528	165.63	7191	262.50

Always state if tank is wood or steel and thickness of tank bottom. Prices of 10" and 12" on application.

PRICES OF ACCESSORIES

Size	Pipe Covering Per Foot		Expansion Joints		Pipe Flanges		Tank Outlet Valves and Companion Flange	
	Wt.	Price	Wt.	Price	Wt.	Price	Wt.	Price
2"	13	$1.05	16	$ 7.35	6	$2.40	9	$10.41
2½"	15	1.20	20	8.40	6½	3.00	15	13.02
3"	17	1.35	18	10.50	7	3.60	24	15.60
3½"	..	....	22	14.70	9	4.20	..	.....
4"	20	1.50	28	18.90	12½	4.80	32	20.76
5"	..	....	40	39.90	14½	6.00	59	26.01
6"	..	....	55	47.25	18	7.20	82	31.20
8"	..	....	95	105.00	27	9.60	122	45.60

Prices of other sizes on application.

TANK HEATERS

For Wood or Steel Tanks

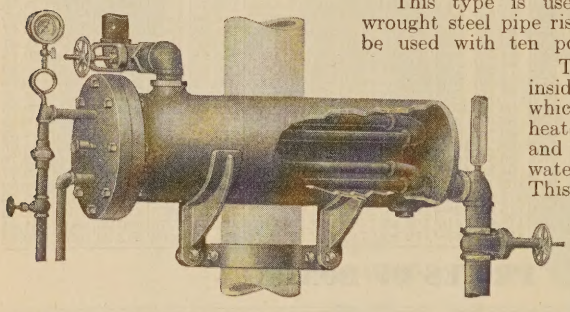
In severe climates it is necessary to provide heat in some manner to prevent the water in tanks and piping from freezing. Boxing and other types of covering will help, but will not do it alone except in mild climates.

Where steam is available we recommend the following types of heater:

STEAM COILS

A pipe coil can be used in the tank for tanks on the ground or on a building or not over 30 feet above. This is shown on page 45. It should be of brass or galvanized iron. Write for prices.

COIL TYPE HEATER



This type is used with cast iron or wrought steel pipe risers. It is intended to be used with ten pounds steam pressure.

The brass steam coil inside heats the water which rises through the heater pipe into the tank and is replaced by cold water from the riser pipe. This circulation prevents the riser from freezing.

The Tank Heater is hung on the riser pipe and is usually set in a pit under the tower or in the top floor when the tank rests on a building.

The size heater needed depends on size and kind of tank, the pressure of the steam available and severity of climate. Price on application.

RADIATOR TYPE HEATER

This type is used with the large plate steel risers 3 feet and larger in diameter, usually furnished with hemispherical and ellipsoidal tanks and towers and is shown on page 45. It is placed inside the large riser and consists of a 2½-inch or larger pipe extending two-thirds the height of the riser or of proper length to give sufficient radiating surface. This pipe is sealed at the top and connected to a fitting welded to bottom. Inside is a 1-inch or larger steam pipe open at the top. Steam and drain connections are taken out at the bottom of the riser into the pit. The drain is usually led to a steam trap.

Where a steam supply is not available a gas or coal boiler can be supplied to furnish the steam. This usually is connected in a closed system to save water. In this case it is necessary to use larger steam and radiator pipes.

OTHER TYPES

Coal or gas-fired hot water heaters can be furnished where steam is not available. These take water out of the riser pipe in the pit usually at the base elbow, heat it and deliver it up into the tank. A shield pipe protects the hot water pipe in the large steel risers. Prices will be quoted on request.

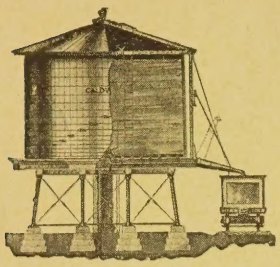
Electrical heaters can be furnished, but they are expensive to operate, except at exceedingly low rates for current.

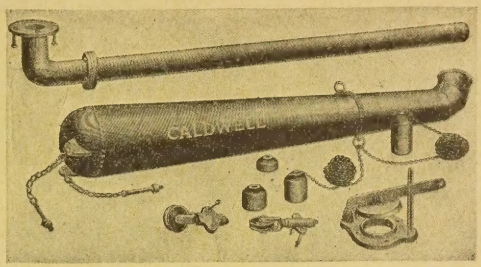
THERMOSTATIC CONTROL

We recommend thermostat control for use with steam heaters as they will save their cost in a short time over manual control. Prices on request.

RAILROAD TANK FIXTURES

Improved Valve, Outlet Pipe, Galvanized Spout and Fixtures





The above cut represents our Improved Tank Fixtures which are strictly frost proof. We furnish these in five sizes: 4, 6, 7, 8 and 10 inch.

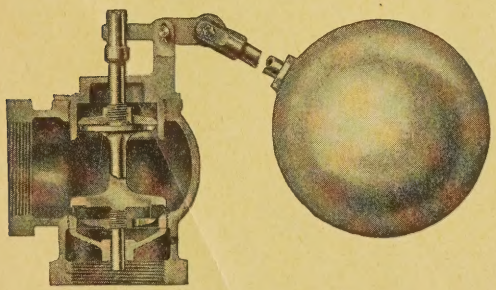
PRICES FOR COMPLETE FIXTURES

as shown above and including Triangle

	4 In.	6 In.	8 In.	10 In.
Fixtures for 10 to 14 ft. diameter Tank	$105.96	$144.00	.....	.....
" " 16 " "	125.97	154.02	$216.00	$298.02
" " 20 " "	.....	164.01	226.02	318.00
" " 24 " "	.....	174.00	236.01	338.01
" " 30 " "	.....	195.00	256.02	368.01

Write for discounts and freight rates or state outside bottom diameter and outside height of tank, distance from center of track to center of tank and we will quote net delivered prices.

CALDWELL BALANCED FLOAT VALVE



LIST PRICES

Size	Ship. Wt.	Scr'd	Fla'd
½"	13	$26.00	
¾" and 1"	13	29.00	
1¼"	14	33.00	
1½"	15	37.50	
2"	30	48.50	$53.00
2½"	40	59.50	66.00
3"	50	77.00	84.00
4"	130	122.50	131.00
5"	165	177.00	187.50
6"	225	250.00	262.00

If for Hot Water 180° F. add 10%.

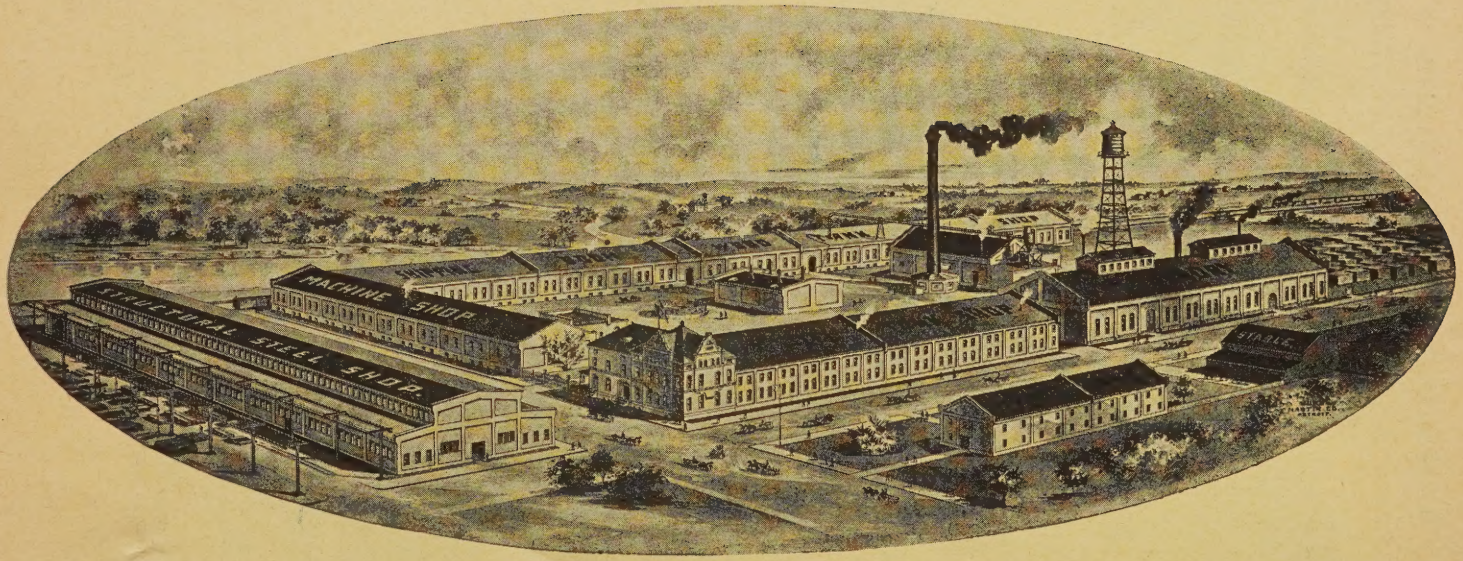
The Caldwell Balanced Float Valve gives very reliable service. It is used on any tank or reservoir where a constant level of the liquid must be maintained.

Its design is simple and the balanced feature causes it to open and close easily and positively without having to have an excessively large ball as the float does not have to work against the pressure of the water.

The valve is rubber and upper packing is leather for cold water and hydraulic packing for hot. These valves are all brass up to 1½ inches. Larger sizes are iron body with brass trimmings.

In ordering state whether cold or hot water is to be used.

Caldwell TANKS AND TOWERS


MACHINE SHOP
STRUCTURAL STEEL SHOP
STABLE